DOCUMENT RESUME

ED 389 382 JC 960 030

AUTHOR	Marashio Paul, Ed.; And Others
TITLE	Pedagogy Journal, 1995.
INSTITUTION	New Hampshire State Dept. of Postsecondary Technical Education, Concord.
PUB DATE	95
NOTE	132p.; Published annually. For Volume 1, see JC 029.
PUB TYPE	Collected Works - General (020) -- Collected Works - Serials (022)
JOURNAL CIT	Pedagogy Journal; v2 n1 1995
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	*Classroom Techniques; Competency Based Education; Critical Thinking; *Educational Technology; Faculty Development; Gerontology; Grading; *Learning Motivation; Lecture Method; Reading Improvement; Student Behavior; Student Motivation; *Teaching Methods; Technical Education; Technical Institutes; Two Year Colleges; Writing Apprehension; *Writing Processes

ABSTRACT

This annual serial volume contains 22 articles offering practical pedagogical ideas from faculty at New Hampshire technical colleges. Section I, "Learners Conversing," includes "'Cheering': A Prelude to a Street Dweller," by Thomas Gorka; "Illusions of Fear: Unleashing My Writing," by Bruce Maville; and "Claremont's Writing Workshop," a transcript from a writing workshop edited by Barbara Dimmick. The second section, "Instructors Facilitating," includes "The Internet as a Student Resource" by Norma L. Forbrich; "How To Keep Your Message...from Getting Lost in the Medium," by William A. McIntyre; "Teaching with Interactive Multimedia Technologies," by Doyle V. Davis; "Learning from Industry: An ISO9001 Virtual Workplace," by David Miller; "Vacation Rebound?" by Gerry Doane, suggesting that semester breaks may increase student anxiety; "'Trying To Turn the Queen Mary on a Dime': Using Student and Faculty Surveys To Facilitate Institutional Change," by Diane Ellis Miles, Neal Steiger, and Maureen Houghton; "Experiencing Aging: The Elderly Simulation Lab," by Donna T. Gagne; "Reading Reclamation," a technique for increasing student reading by Denise S. St. Cyr; "Advantages of Engaging Students in Personal Writing," by Francesca Fay; "The Art of the Lecture is in the Performance," by Paul Marashio; "The CS Grade: A Child Poised for Adulthood," by R. Allan Dermott, reviewing benefits of the "continued study needed" grade instead of an "F"; "Critical Thinking: Something To Think About," by Denise S. St. Cyr; "Guided Independence," by Barbara Dimmick; and "Organizing Thinking: Teaching Students To Learn Independently," by William V. Wheeler. The final section, "Binding into Community," includes "You Want Me To Do What by When?? Or Faculty Orientation/Mentoring Program" by Terrie Judge; "Connecting Life with Classroom Learning," by Sandra Cole; "The Talking Composition," by Bill Warnken; "Students as Assessors," by Nancy Marashio; and "Becoming Teachers and Learners: The Evolution of a Survey Course," by Keith W. Bird. (TGI)

ED 389 382

PEDAGOGY JOURNAL

Volume 2 1995 No. 1

"PERMISSION TO REPRODUCE THIS
MATERIAL HAS BEEN GRANTED BY
H.J. Rahn

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)."

"Not only is there an art to [illegible] a thing, but also a certain art in teaching it."

[illegible] Cicero
([illegible] BCE)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

JC 960 030

New Hampshire Technical Colleges & Institute

BEST COPY AVAILABLE

PEDAGOGY COMMITTEE

Board of Editors:

Jo Ann Clifford	*Bill McIntyre*
Jean Clouatre	*Karen Noonan*
John Colbath	*Susan Perry*
Nancy Marashio	*Denise St. Cyr*
Paul Marashio	*Bill Wheeler*

Republication in any form, whether or not for profit, is the exclusive right of the individual author and the editors. © Copyright 1995

Cover: Jere Turner, NHTC-Manchester

PEDAGOGY JOURNAL

4

New Hampshire Technical Colleges
and Institute System

PREFACE

Utopia College

Paul Marashio
Pedagogy Committee Chair

Visitors to Utopia College System's classrooms witness learners cooperatively interacting with each other; collecting data; sharing and exchanging interpretations, analyses, and ideas. Concurrently, instructors facilitate, lead, advise, and participate in the learners' conversations. These learners, with the help of their instructors, are on a demanding, yet rewarding journey toward becoming a learned person. Utopia College System's academic community steadfastly believes thoughtfully planned, constructed, and executed instructional methods are the key to unlocking the learner's mind.

Within New Hampshire Technical Colleges and Institute System there is a commitment by the academic community to move the System continuously closer to the Utopia College System's Pedagogy philosophy. The articles in this volume of the "Pedagogy Journal," as in the previous volume, are tried, tested, and thus proven successful instructional methods that both engage and immerse learners in an interactive educational process.

Distinct influences of Jerome Bruner, John Dewey, and Aristotle - learners learn best by doing - are burnished in these articles. These inviting pedagogy ideas call out to us, ***"give me a try."*** Whenever the seeds of active learning are planted, watered, cultivated, nurtured to germination and finally to maturation, our System grows closer toward the Utopia College System's Pedagogy model.

The thrust of the "Pedagogy Journal" is fourfold; (1) to bring the System closer to the UC System Pedagogy model, (2) to offer a faculty to faculty pedagogy exchange forum and network, (3) to encourage system faculty to write pedagogy articles for the "Pedagogy Journal," and (4) to continue fostering the binding of the System's academic community.

The Pedagogy Committee enthusiastically thanks the contributors for making Volume II of the "Pedagogy Journal" a success and for binding the System into an even stronger, prouder community. Our deepest appreciation to Commissioner H. Jeffrey Rafn, who supports and encourages the "Pedagogy Journal" both through words and deeds. A special thank-you to Victor Somma, whose professional expertise and guidance contributes to the Journal's touch of class and to Jan Eakler whose secretarial talents pull the Journal together. To the Pedagogy Committee, specifically, the editorial board, my heartfelt gratitude for your tireless efforts in making the "Pedagogy Journal" a reality and a success.

To our readers - you are encouraged to use any idea that strikes your imagination. Feel free to contact any of the contributors for assistance or for exchanging ideas. The contributors' colleges and college telephone numbers are listed in the end of the Journal. The Pedagogy Committee believes you will enjoy these articles as much as we enjoyed bringing them to you.

Paul Marashio, Chair
Pedagogy Committee

INTRODUCTION TO A CELEBRATION

As educators, many of us are overwhelmed by the task of reorganizing and reforming postsecondary education to meet the rapidly changing needs and demands of tomorrow. Embroiled in the inevitable controversy, pain, and confusion inherent in such a task, it is easy for us to forget the true purpose of our business. Budget cuts and revenue shortfalls seem to swallow the whole of our energy and to snuff out the very joy of knowing that providing an environment where people can learn is the essence of our work.

This journal is a *celebration* of teaching and learning. As a celebration of the colleges' central mission, it is a resounding reminder that behind the struggle to become administratively and programmatically more efficient, to do more with less, stands the student needing and eager to learn. It is meeting the needs and serving this student to which each of us in the technical college system has dedicated our working lives. This journal reminds us of the joy of such an enterprise.

Historically the education community has focused on teaching, imparting knowledge from the learned to the unlearned. When a student failed, the student was typically faulted for failing to accept that knowledge from the teacher. We are now beginning to understand, however, that students learn; they are not taught. Learning is an intensely personal activity. No two persons learn in exactly the same way. Further, learning occurs all the time, not just in fifty minute class hours. We are beginning to realize that we need to create learning environments where everyone, faculty or not, is engaged in providing an environment where students can learn. These learning environments must allow the student to engage in learning in ways that draw on his or her abilities and strengths.

At first glance, it may appear that a journal on pedagogy is inconsistent with this view. After all, on its face it is a celebration in and an exploration of teaching, not learning. I prefer to see it, however, as a discussion of the many different learning environments one can create through a variety of teaching methods. Creating virtual workplaces, using multi-media, going on-line with Internet, mentoring, facilitating, lecturing, student directed learning, critical thinking, learning through writing, and building community; these and others are types of learning environments the reader can explore and create through this journal. Each of these allows a student to engage in learning in a way that personally suits him or her. Each of these environments is a celebration of the individual and education. This is what the New Hampshire Postsecondary Technical Education System is about. It is this for which we can take pride and joy.

Dr. H. Jeffrey Rafn
Commissioner

CONTENTS

Pages

PREFACE
Paul Marashio

INTRODUCTION
Commissioner H. Jeffrey Rafn

Section I - Learners Conversing

"CHEERING:" A PRELUDE TO A STREET DWELLER 3-5
Thomas Gorka

ILLUSIONS OF FEAR: UNLEASHING MY WRITING 7-12
Bruce Maville

CLAREMONT'S WRITING WORKSHOP 13-25
Nancy Blair, Sandra Cole, Lorraine Cosseboom, Barbara Dimmick, Norma Forbrich, Andrea Gordon, Diana Lindquist, Jane Whittington Picard, Regina Raymond, Walter Ryan

Section II - Instructors Facilitating

THE INTERNET AS A STUDENT RESOURCE 29-32
Norma L. Forbrich

HOW TO KEEP YOUR MESSAGE FROM GETTING LOST IN THE MEDIUM 33-37
William A. McIntyre

TEACHING WITH INTERACTIVE MULTIMEDIA TECHNOLOGIES 39-44
Doyle V. Davis

LEARNING FROM INDUSTRY: An ISO9001 VIRTUAL WORKPLACE 45-50
David Miller

VACATION REBOUND? 51-55
Gerry Doane

"TRYING TO TURN THE QUEEN MARY ON A DIME:" USING STUDENT AND FACULTY SURVEYS TO FACILITATE INSTITUTIONAL CHANGE 57-64
Diane Ellis Miles, Neal Steiger, and Maureen Houghton

EXPERIENCING AGING: THE ELDERLY SIMULATION LAB 65-67
Donna T. Gagne

READING RECLAMATION 69-72
Denise S. St. Cyr

ADVANTAGES OF ENGAGING STUDENTS IN PERSONAL WRITING 73-75
Francesca Fay

THE ART OF THE LECTURE IS IN THE PERFORMANCE 77-78
Paul Marashio

THE CS GRADE: A CHILD POISED FOR ADULTHOOD 79-82
R. Allan Dermott

CRITICAL THINKING: SOMETHING TO THINK ABOUT 83-88
Denise S. St. Cyr

GUIDED INDEPENDENCE 89-97
Barbara Dimmick

ORGANIZING THINKING: TEACHING STUDENTS TO LEARN INDEPENDENTLY 99-103
William V. Wheeler

Section III - Binding Into Community

YOU WANT ME TO DO WHAT BY WHEN?? OR FACULTY ORIENTATION/MENTORING PROGRAM 107-109
Terrie Judge

CONNECTING LIFE WITH CLASSROOM LEARNING 111-113
Sandra Cole

THE TALKING COMPOSITION 115-120
Bill Warnken

STUDENTS AS ASSESSORS 121-130
Nancy Marashio

BECOMING TEACHERS AND LEARNERS: THE EVOLUTION OF A SURVEY COURSE 131-135
Keith W. Bird

AUTHORS 136

Section I

LEARNERS CONVERSING

"CHEERING"
A Prelude To A Street Dweller

Thomas Gorka

At the age of five or six, I went to school like everyone does. Kindergarten was a wonderful experience - I mean wonderful. The teacher was Miss Mossgrove, a kind, loving lady. We did all of the things that children love to do. We played. We built play areas out of colored 2 x 4 logs with holes in the ends for assembly with steel rods, so the logs could be fashioned into imaginative spaces. The kindergarten faced a courtyard, only accessible to us. Although the entire school, K - 3, could look in, the courtyard was ours alone. There were a fountain, several marble statues of ancients, and long swings, hung as a retrofit from the white stucco interior, great swings. There were pretty flowers, shrubs and lots of grass - what a wonderful setting to start the long educational experience.

I was in grade three. I did not add 34, 87, and 63 correctly. I felt inadequate. Furthermore, my nice 3rd grade teacher said, "Thomas you are having difficulty with math, aren't you?"

I thought, "Me, Thomas? What are you saying? You are my favorite teacher."

In grade five, I was not sure how I felt about Mrs. Westfield. "Thomas, you are taking too long in multiplying those numbers - perhaps you have a math deficiency. What do you think?"

By the time that I reached Normandin Junior High School, I knew that I was mathematically deficient - a pubescent child, scared forever.

At the YMCA, the swimming instructor said, as I gulped chlorinated water by the quart, "Tommy, you're doing fine, just kick your strong legs faster and . . ." I made it to the end of the pool.

In grade four, we did a science project. We grew navy beans in a glass with a wet blotter, you know, everyone did that experiment. In a few days, against the wet blotter, the beans germinated long lovely sprouts, pale green, reaching for the sunlight. "Thomas" - "Yes Mrs. Thistlebottom," "How come your beans failed to grow? Thomas, answer me." Well, Mrs. Thistlebottom, perhaps you gave me irradiated beans so I would feel failure - How do I know, you're the smart one. Really, I said, "I'm sorry, I must have made a mistake."

Why do we, as instructors in the academic realm, berate our charges, whereas in the physical realm, instructors encourage?

I'm 38 years old and learning to rock climb when I find myself on a narrow ledge, too timid to make the move around the corner. "What are you waiting for?," the instructor asks. "I can't make the next move." "Tom, with those long arms and legs of yours, you should be able to vault over three handholds." And I did, a bit embarrassed, but I did.

My transition from junior high to high school was the final step in my pre-college schooling and just getting there brought some sense of pride.

In grade ten, the English instructor's style was for us to read out-loud when chosen at random, first from "A Tale of Two Cities" and later from "The Canterbury Tales". With sweaty palms and uncertain voice, I stood and stammered whenever it was my turn to read, only to hear, "Mary, perhaps you can do better, read on."

In grade 11, **the whole academic realm changed**.

"She", the English teacher, looked like all my teachers: old, larger than life, and in charge. She had blondish hair, glasses, and was a bit heavier than lean, but "soft", a strange thought "soft". As she outlined the rules that we all do on day one, I was not as anxious or intimidated as much as in other classes. "I want you all to write as part of this class. Each week, on Friday we will listen to selected writings from the previous week" - No thank-you, I thought. "As our first topic, I would like you to write about where you live."

Our family had just moved into the house that my father, my mother, my two sisters and I had built. The house was located on the north side of Tarkiln Hill Road, probably the site of a tar kiln earlier which serviced the whaling and later, the fishing industries in New Bedford. Tarkiln Hill Road was also the demarcation line of urban versus rural New Bedford in some earlier time. I am surmising this because the animal husbandry of swine was not permitted south of Tarkiln Hill Road. In my first public attempt at humor, ever, I entitled my piece about where I lived "North of the Pig Line". My essay was chosen as one to read on Friday next, AND I was born. I read other pieces, probably every other week. Grade 11 was a good year. Grade 12 was even better. Word spreads; it must have. Physics was good, U.S. History, taught by a reputed "terror" was very good, no assaults, much positive reinforcement, and Math 12, taught by Melver Feton, was another triumph.

So, three years after I entered New Bedford High School, I along with 300+ graduates, marched up William Street in a graduation procession in June of 1955 and graduated. I still didn't have a clue as to what I would be "when I grew up," but I knew viscerally, for the first time since kindergarten, that whatever it was, it would be OK.

Thank-you Miss Newland, my eleventh grade English teacher. Thank-you for noticing something in me that up until that point in time was overlooked.

Today, in spite of my computational deficiency and my inadequate science skills along with poor language ability, I have earned a Masters Degree in Science from Clarkson College of Technology. In spite of my shortcomings in math and my dead navy bean plants, I teach Science with zeal and competency.

Also, I have swum many miles, paddled solo on the Connecticut River from Canaan, Vermont to Long Island Sound and from Albany to Buffalo along the Erie Canal, among other physical pursuits.

I am sure that the readers can cite many similar events in their academic life. Why do so many "educators" ***discourage*** instead of ***cheer***? Cheering is a well-established teaching strategy for success. If my grade 11 English teacher, Fay Newland, hadn't cheered me on, I might be a street dweller today. ✝

WHY DON'T TEACHERS CHEER MORE?

ILLUSIONS OF FEAR

Unleashing My Writing

Bruce Maville

For students, the first weeks of writing class are filled with fears and anxiety. This may be (as the dictionary's definition says) "desire to escape danger."

In a class with others I didn't know, I was intimidated and fearful, to put it mildly. For me it is difficult to identify feelings, yet my ego is much like a halo mounted upon an angel's head, something subconsciously there from childhood. My fear of writing gave me feelings of being the only one present in class with the professor. My oxygen supply seemed limited, making me feel as though I were suffocating. What had I gotten myself into?

Everyone was told he/she would write, in and out of class, and would read their papers aloud. I thought I might accomplish these tasks with ease, but I soon found out that what I thought was just not reality. This experience called writing, I wrote in my first Prose I in-class paper, was just a requirement for the program. I already knew how to write. What I didn't know was that for the next fifteen weeks I would struggle with frustrations that were unexplainable and down-right weird. These included waking up in the early hours to write and writing about extremely personal moments in my life or thoughts I enjoyed but had never shared with anyone.

I remember hearing the teenagers telling the younger children to "toughen up" or "big boys don't cry". Memories of my childhood and school days quickly returned, clouding my thought process. I couldn't remember ever having been afraid of writing. Had this fear always been there? Was it something different or even something new? Was it just me? Did others in class have these same feelings of insecurity? What about the novice or even professional writers? How had others truly felt? Were their feelings the same as mine?

It wouldn't be until this article that I would truly understand the words of Donald Murray: "Writing isn't magic, but then magic isn't magic either. Magicians know their craft, and writers must also know their craft." (1984) Murray continues: "Study how effective writers write - writers of all kinds: science writers, novelists, business writers, critics, poets, journalists, technical writers, playwrights, historians, scholars, movie and TV writers, memo writers, essayist - and you will discover that there are more similarities than differences among those that practice the writer's trade."

In a "Case History of An Article", February 1986, Murray reveals the personal side of his life, along with describing how the revision of the article came together. His process of writing only appears to be automatic and done with great ease.

Murray forms his words into sentences, placing them into detailed paragraphs with distinct grace and elegance; feelings are articulated through each word; words and feelings become molded as one. Murray feels a part of his process. Look how he shows his feelings in this excerpt of his poem about his daughter's death.

. . .I hope my teaching helped
when she lifted herself up from the machines
the wires the tubes
which held her to us for three long days
so short in memory.

The smile she now smiles to comfort
me . . . (1984, Winter)

First observation is writers like Murray have a gift that others don't. In comparison, my words seemed like a sea of oily sludge trying to disperse itself. How would I, like Murray, be able to show feelings, say nothing about grace? Ernest Hebert says, "I don't recommend writing, only if you are driven to do it." My major frustration, reached late, was admitting, even as professionals do, I like to write.

Gordon Kirby makes his writing appear effortless, taking the reader through an auto racing event, making it sound and feel as though you were sitting beside the track. Kirby says, "it never gets any easier. You must learn to work at it more effectively, more lovingly. It is a craft and you must always nurture it, make it the motivating factor in your life."

I interviewed writers about frustration, questioning:

> How do you really feel? You described that you did overcome the obstacles of the frustration. Was there any particular type of writing or thought process that you used to get rid of those obstacles, or was it just a something where you had to just keep plugging away and eventually the obstacles eroded?

Nancy Marashio's response to the last part of the question was, "That's a good question, because my suspicion is you don't know those things until you look back later and you see where you are in relation to where you were. I think just writing pieces that I like to write is what broke the frustration. Sort of taking the bit in my teeth and liking what I'm writing, instead of just doing it for somebody who told me to, was probably the break through . . . there still is frustration, but . . . the frustration now sort of urges you on to do more. It's not negative frustration, it's not debilitating frustration. It doesn't take away. It adds because the frustration now is — I haven't got it yet, can I? But the positive came by finding pieces that I liked and finding people who liked my pieces rather than just going to the people that supposedly should be the decision makers: I don't always agree with the decision makers."

I soon learned to write what I wanted. Decisions were mine; only I had to be pleased. Then, came my struggle with the words. The frustration of not being able to articulate what I wanted to say hung like a cloud over my head. Words never seemed to fit sentences, nor did the sentences fit paragraphs.

My ability to articulate melted like an icicle hanging off my roof in the middle of the winter. Words were forced, dragged out in order to be placed on paper. At times, nothing would or could flow from pen to paper. What was certain was the consciousness of my mind, but my clouded thoughts continually made for trying times and frustrations. Even more unsettling was being unable to make my writing appear effortless, as some of my classmates had.

Fears of others listening to or reading my work and making comments proved just as challenging as the writing itself. I found I wasn't alone, as one of my classmates adamantly kept stating her displeasure with having to read aloud and even to make comments about the writing of others.

What is clear, even in Prose I class, is I had to see both sides of my writing. Learning to use friends, editors, publishers. and even family members is like easing the step of spending years revising my work to find what I am truly trying to say. An excerpt from an article of David Huddle clearly states what many writers say: "In composing this essay and discussing it with my writer friends, I've come to see that just as a real writer takes what he or she needs from a teacher, so too, a writing teacher gives what he or she can." I soon realized if I have something that isn't for public viewing, I make sure others don't see it.

Annie Dillard, Rebecca Rule, Murray, and even Marashio say that the process of revision, although frustrating at times, makes writing better. Dillard was once told by an editor to remove five column inches of an essay that she wrote; she responded, "it made it better." Rule had one editor tell her that the last five pages of a short story she had written needed to go; "it made the story better."

When Kirby was asked what obstacles he had to overcome, the he responded, "Just keep working. Pick yourself up from your failures and move on. Work hard and be your own toughest critic." Kirby's struggles have been the same as everyone else, even after dropping out of college. A writer's education may be in the form of a Ph.D., Master's or Bachelor's degree, or even the school of learn-while-you-go. Formal education speeds up the knowledge of grammar, sentence structure and punctuation. But for a novice like me, writing accomplishments seemed only a distant dream that may or may not be within my grasping reach. Still the struggles, as each writer has said, are the same.

Each person possesses his or her own writing style; as Murray explains, "this made it almost impossible to comprehend. Was my style the right one, or was I doing it the wrong way." (1984) The writer's style is as simple as sitting down at the typewriter or as strange as driving around the country side in a car plotting a story by day and typing it by night, as Hebert does.

"As writer, you can draw on everything you have seen or heard or learned and everything that's ever happened to you. You have as well everything you've ever felt or read or comprehended or failed to comprehend . . . You have your past to draw on: family, or lack of family; relationships within the family, with friend, with enemies. There are the places you have been or want to go, from Middletown to Marrakesch; there are all the people you have met or heard about or seen or overheard." (Paton quoting Kit Reed)

True frustration and feelings of anger are hard to remove from the writing. What seems to be difficult for all writers is part of the process that separates the writer from the negativism that can be displayed within his/her writing. Kirby, when asked "When you write, what part of you are you trying to express?" responded, "Sometimes as a journalist, you must keep yourself out of it entirely. Other times you have to jump in with all your intellect, wit, and passion."

Some choose to camouflage the true existence of their personal lives. Joyce Maynard chooses to display her personal side in full view of the world. Maynard writes magazine articles about domestic affairs, using her family experiences. Writing about the personal side of life, whether hidden or in plain view, allows the reader to relate through personal experience.

According to Harvard writer Nancy Sommers, "If I could teach my students one lesson about writing it would be to see themselves as sources, as places from which ideas originate, to see themselves as Emerson's transparent eyeball, all that they have read and experienced - the dictionaries of the lives - circulating through them. I want them to learn how sources thicken, complicate, enlarge writing, but I want them to know how it is always the writer's voice, vision, and argument that create the new source. I want my students to see that nothing reveals itself straight out, especially the source all around them."

I now truly understand what Marashio was saying about the process of writing in class. The step by step instruction had its purpose and direction. Each of us is a writer, with each displaying different levels of writing ability and experience. Our mistakes are correctable with outside help; we will learn from our own as well as those of others.

Revision, as many times as it takes, until we say "It's good," is a learning experience that all writers face. Everyone can truly write with a little determination, love and understanding — leaving the negative fears behind-as writing in itself is hard enough. What is clear is each of us has to admit, "I'm a writer." We can achieve the smallest or largest of goals, with the sky being the limit.

As our fellow writers have before us, give writing a try. Write for the fun of it; let your imagination go free with the breeze. The fears are normal, but with a little nurturing from yourself and those around you, you just may like this challenge called the PROCESS OF WRITING. ▾

REFERENCES

Dillard, Annie, (1989 June). Interview (tape). American Audio Prose Library.

"Fear", (1993). Webster's 21st Century Dictionary. Nashville, Tennessee: Thomas Nelson, Inc. 105.

Hebert, Ernest, (1993 Spring). Presentation about Writing (video tape). Claremont: New Hampshire Technical College.

Huddle, David, (1991). "Taking What You Need, Giving What You Can: The Writer as Student and Teacher." Writers on Writing. A Bread Loaf Anthology. Robert Pack and Jay Parini eds. Hanover: Middlebury College Press. 74-85.

Kirby, Gordon, RACER Editor At Large, (1994 June). Written Responses to questions.

Marashio, Nancy, (1994 April). Interview about writing. Claremont: New Hampshire Technical College.

Marashio, Nancy, (1994 April 5). "Notes about Gordon Kirby Presentation." Day Book. 79-81.

Maynard, Joyce, (1993 Spring). Presentation about Writing (video tape). Claremont: New Hampshire Technical College.

Murray, Donald M, (1986 August 1). "A Strange Comfort." Boston Globe. 7.

Murray, Donald M, (1986 February). "Case History of An Article." Durham: University New Hampshire.

Murray, Donald M. (1984 Winter). "My daughter waits." Tendril, No. 17.

Murray, Donald M, (1984). Write to Learn. New York, NY: CBS College Publishing.

Paton, John W, (1985 Spring). The Writer as Teacher. Wesleyan. Volume LXVIII, No.1. 2-7.

Rule, Rebecca, (1994 April). Presentation about Writing (video tape). Claremont: New Hampshire Technical College.

Sommers, Nancy, (1993 April). "I Stand Here Writing." College English, Volume 55, Number 4. 420.

CLAREMONT'S WRITING WORKSHOP

Nancy Blair, Associate Professor,
Child Care Program Director

Sandra Cole, College Counselor, General Education Adjunct

Lorraine Cosseboom, Accounting student

Barbara Dimmick, Workshop Leader and Professor,
General Education

Norma Forbrich, Professor, Director of Network Education

Andrea Gordon, Professor,
Medical Laboratory Technician Program Director

Diana Lindquist, Child Care student

Regina Raymond, Associate Professor, General Education

Walter Ryan, Professor, Manufacturing Technology

Jane Whittington Picard, Director of Public Relations

edited by Barbara Dimmick

Writing Workshop began as a two-credit elective offered to students who wanted to continue writing after they had finished our required courses Prose I and II. The class was always small; usually more students wanted to take it than were able to fit it into their class schedules, or, indeed, into their lives. Soon, one or two interested faculty were sitting in as participants. For several years, Writing Workshop remained a small but valuable gathering which took place weekly nearly every spring semester.

Faculty participation surged during the Spring semester in 1994. After a single announcement at an all-college meeting, eight or nine faculty expressed interest in joining the workshop. There was some trepidation about sharing a course with students, so that spring, partly because of scheduling conflicts and partly to calm the nerves of both faculty and students, there were two sections of Writing Workshop: one for faculty, one for students. One accomplishment of that spring workshop was the writing of five pieces published in the system-wide Pedagogy Journal. The following fall, a faculty-only workshop met again. Interest was even greater: twelve faculty volunteered to meet every week at the ungodly hour of eight a.m. Their laughter often rang down the hallway, prompting passers-by to ask what on earth was going on in there. This spring, Writing Workshop has once again become a shared enterprise of faculty, staff, and students. What follows are some reflections, written by past and current participants on what happens in Claremont's Writing Workshop.

WHAT AM I DOING HERE?

***Norma*:** What am I doing here? This is a writing workshop. For writers. Writers are different from the rest of the world. Writers take ideas from one or many sources then weave words around them to entrance, elucidate, and possibly illuminate. Authors are even more rarified creatures than writers: several someones have **paid** to read those words.

I am not a *writer*. I am an ordinary person who must communicate with others through words on paper, whether cellulose or electronic, through words separated from me by time or location. Neither am I a *scribe*, for I choose the words and each topic they describe. Nor am I a *reporter*, for I have some measure of control over the events.

It seems to me that there really ought to be another word to describe the application of thought to words for private publication. How about a *scribbler*?

***Andrea*:** When I joined Writing Workshop in the spring of 1994, I had no clear vision of what it would entail. I had recently begun writing to document personal reflections. My short term goal was to use Workshop to increase my writing skills and in the process increase the depth of my personal writing.

***Diana*:** Teachers and students on the same level as equals - what a concept! The concept, as a newcomer to Writing Workshop this semester, was horrific. How could anything that I would write compare to the excellence of a teacher's work? That's why they are the teachers and I am the student.

***Walter*:** I'm not sure why we take part. At some level we are driven to write. There are probably more reasons for being driven to write than there are writers. A very pragmatic answer is that it makes the process of getting to a final draft much easier and quicker.

***Norma*:** Writing Workshop provides a setting for target practice and coaching. Whether as preparation for competition or survival, it sharpens skills for participants. That's what I'm doing here! Improving my survival skills.

***Nancy*:** I was so afraid to write and share that writing with others. Everyone said, "Come to Writing Workshop. You'll really enjoy the experience." I couldn't imagine struggling to put words in a coherent manner onto a piece of paper to say something and then sharing that struggle with others whom I hardly knew! But I was into risk taking at that point in my life and decided to take a chance with this group.

***Lorraine*:** I came to this creative writing class somewhat a novice. I was a student, and they were professors. The knowledge that surrounded me was inspiring. I was comfortable; they seemed comfortable.

Then came the moment of truth; we were asked to submit a first draft. The writer within panicked, "About what?" A few professors casually said they would submit this or that piece.

One professor said, "Just sit down and write, the rest will come." I decided I could do this; after all I had done a first draft before. I heard myself commit to a first draft for the next week.

The writer within was still jumping around in my head shrieking, "First draft? About what? Next week? Are you crazy?"

BOUNDARIES AND BALANCE

***Walter*:** Any group needs a leader. We need a leader to establish a meeting time and place. We need a leader to set up a method for copying and distributing manuscripts. We need a leader to focus the discussion. This last is most important. Left to ourselves we are too nice.

We need a leader to say, "We have pieces from Joan, John, and Jan today. Who wants to start?"

We need a leader to say, "What did you like about the piece?"

We need a leader to say, "Where did you get lost? Was anything confusing? What suggestions do you have?"

We need a leader who will keep these discussions focused on the piece of writing and not on the writer. This last is most important. Some of us are unsure of our writing. We have fragile egos. We need to remember that our job is to improve the writing not to comment on the writer.

Barbara: On a good day, conducting the workshop is like sailing with a fair wind: I scan the horizon, adjust the tiller, pull the hat low over my eyes, and soak up a little sun. Rules matter, but within their bounds, we have plenty of room to maneuver, plenty of wind in our sails.

The first rule is that everyone is welcome, so long as they want to write and are willing to read for others. There is no rule, however, about how ***much*** anyone writes, although sheepishness and guilt at not having written have forced more than one writer in the group to the keyboard.

On the day of workshop, the writer is allowed to speak before a draft is discussed. Some writers waive this opportunity, but some use it to remind us what kind of feedback they are looking for.

The group begins by addressing two related questions: What did they "get" from reading the piece? And, what did they like about reading the piece? Whenever possible, I coax readers to be more and more specific: Which details were vivid? What part of the ending was especially moving? Why did the central image seem to work? Only those readers who wish to respond do so. It is always fair for readers to remain silent if they could find nothing that appealed to them in a work. In time, we come to find something interesting in nearly everything. This is not a whitewash, but a way of looking at work for its strengths and possibilities.

Next, we move on to questions, problems, and ideas for the piece. These often take the form of so-called "I-statements," as in, "I couldn't figure out the middle stanza of this poem." Often questions are raised at this point: "Was there a reason for not telling us the name of this character?" Some of these questions are technical: "Under what circumstances is it okay to have a one sentence paragraph?" Or, "These semicolons seem to make this sentence stiff. Or is that just me?" And some of the most interesting questions are what if's: "What if you wrote this story for children?" "What if you thought about a particular market?"

The last step is checking in with the writer. Some have follow-up questions about aspects of the writing no one mentioned. Some have specific questions about our often wildly contradictory advice; we seldom come to a consensus. Some I make sure to ask if they are all right; it reminds us all just how difficult it can be to have our work read.

Always, always, always it behooves all of us to strike the difficult balance of being candid but helpful. That's a skill, and every semester the old hands in the workshop get a little better at it; the new ones learn by listening and seeing the powerful effects of a workshop which seeks to improve the writing of every member--no matter where that member is at that point in her or his writing.

IT SOUNDS SIMPLE

***Walter*:** The best way to participate in a writing group is to write and to read. That may sound trite, but the purpose of being part of a writing group is to improve one's own writing and to help the other members of the group to improve theirs.

We write. We circulate our drafts to the other members of the group. We read each other's drafts and write comments and notes on them. We meet on a regular basis to discuss these drafts.

It sounds simple. The truth is that it is not as simple as it sounds. As with any other group, each writing group has its own dynamic.

***Jane*:** Our group invests itself in the elevation of everyone's writing. Participants make a commitment to read one another's work thoughtfully, to respond to submissions with respect, and to comment honestly on what does or does not work.

***Barbara*:** Writers in the group write whatever they wish to write. Diversity makes the workshops interesting as we move from the first draft of a children's story to the third draft of an essay for a contest to the first revision of a pedagogy piece.

Writers must, however, do the following: They may only bring to the group writing which matters to them, writing to which they are committed in some way. They may also only bring writings which they are willing to have discussed. Finally, each writer must also see that every other member of the group has a copy of the work to be discussed. Often it helps if the writer provides a cover sheet which tells us what we are about to read--first draft? revision? experiment?--and how we can be the most helpful--content? concept? beginning, ending, clarity...?

Members of the group bear a second set of responsibilities, too. They must come to every meeting if at all possible, and they must try to be good readers for one another.

I sometimes think being a good reader is as difficult as being a good writer. Workshop members read each piece in advance, writing comments in the margins, and often offering some kind of summary commentary as well. These critiques can be a struggle. Alan Ziegler's " 'Midwifing the Craft'--Teaching Revising and Editing" provides helpful notes on how to be a good critical reader. What I suggest is that readers look for meaning and for successes, and that they try to document their own responses to the text. In time, most of us fall into the habit of saying "I got lost on the bottom of page seven." We respond to the text, but we do not accuse the writer of having done a crummy job nor do we label the writing as muddled or incoherent. We also fall into the habit of saying, "What I really liked about this piece was..."

"Search and destroy" is not our methodology.

WORDS ONTO PAPER

***Walter*:** What do we write? Anything. In the past few months we have written personal essays, newspaper columns, chapters of a guidebook, handout sheets for students on topics ranging from blood to mechanics, poems, parts of novels, angry letters to a family member, scholarly articles, and more. There have been some publications, some pieces are still languishing on editors' desks, some are in the process of being reworked, and some are abandoned in desk drawers or stored in files waiting for another day.

These pieces were written by faculty, students, staff, and members of the outside community. These pieces were written by writers.

***Andrea*:** Until a few years ago, my writing had consisted of technical procedures, research papers or official memos. Dry, technical and clear in structural guidelines, these documents required no creative process on my part.

It was totally unexpected, therefore, when I decided to write a *creative* technical piece for my students. I had read, reread and commented on technical works by other faculty. Essays and chapters which were to be used in text books, journals or as handouts to assist their students in various stages in their learning were presented by other faculty during that semester of Writing Workshop. Approximately halfway through the semester, it occurred to me that perhaps I could use the workshop forum to develop material to be used in my courses, in a format different from what was considered traditional.

Walter*:** In my own case, in the past year and a half, I have written a chapter for a forthcoming book on industrial history, a piece for the ***Pedagogy Journal, two sets of handout sheets for manufacturing technology students, that might become part of a book, two sections for a forthcoming fishing guidebook, a set of directions for tying a trout fly, and a personal essay for a submission to a writing contest. My productivity amazes me.

***Norma*:** What have been my scribblings thus far? An instructional manual for all local users of a new technology, a short story describing an imaginary picture, a requiem for an elderly cat, thoughts on language mores.

Regina*:** Writing Workshop was fun and hard work. I worked very hard to develop my writing skills. I got off to a slow start and was just ***beginning to know what I needed to do when the semester ended. What I need to do is join the workshop again.

***Andrea*:** In the advanced Medical Laboratory Science course Hematology, there are several areas which are especially difficult for students to grasp. I have frequently found myself swearing under my breath at the texts currently available in the field. The material is either so basic that it doesn't provide the concepts necessary for understanding or it is so detailed that the student becomes lost in molecular complexities. It became my goal to write a clear and concise piece to help the students grasp the structure and function of the hemoglobin molecule.

At the time I began the piece, I still wasn't sure I would actually put it into practice, so I pursued a non-traditional model without fear of failure. I chose to focus on one hemoglobin molecule named Henrietta. In the format of a narrative story written by Henrietta, I proceeded to describe the necessary details of hemoglobin formation, structure and functions including succinct charts, hand drawn diagrams, and tables to accentuate important facts. I kept the pace light, trying to prevent the student from becoming lost in medical rhetoric.

***Lorraine*:** I sat at my word processor and began to write. The subject had been milling around in my head, so that part was easy. I continued to write, rewrite and write some more. I checked for grammar to the best of my ability and rewrote some more.

I read it to my dog, and when I thought it was good enough, I read it to my husband.

Taking into consideration his comments, I began to rewrite again. After this rewrite I decided to leave it alone for a while, at least a few hours so I could get some sleep.

After a day or so a piece looks quite different. Errors in grammar and timing jump out at you. What I thought was good didn't seem very good anymore so I re-wrote again.

A few finishing touches and the final rewrite, or shall I say 'first draft', is ready for class.

WRITER MEETS READER

***Diana*:** Bravely, by the second week I had something to copy and pass out. I had already shared the title with the class and they said they would be interested in reading the piece. I thought that it was just plain drivel with a good title.

***Regina*:** The fun part was reading the selections others wrote and discussing them in class.

***Jane*:** Sharing writing for the purpose of criticism feels a little like throwing a ball against the broad side of a building. How the ball comes back is a measure of how well the work communicates. If workshop participants have a lot of questions and are generally unable to connect with the piece, the ball bounces back wildly. If they have been able to enter and travel through the writing with relative ease but have noticed specific structural or language problems, the ball comes back a little crooked.

Diana: By the end of the comments and questions about my piece, I was feeling as though this piece wasn't just fluff or a warm-up piece. They liked the concept, the presentation, and the first sentence. They did say that if I were to revise the piece I would need to expand upon my details.

I had made it. They hadn't shot down the whole piece. They had positive feedback for me. Overall, the experience was very helpful and enlightening.

Jane: Ours is a supportive group whose leader is committed to a technique that emboldens rather than deflates the writer. Equal opportunity is given for positive and negative comments. Ideas for revision are peppered with reminders that it is the author who must ultimately decide what to keep and what to change.

Walter: Left to myself I probably would discover that the sentence that I have buried in the middle of the fourth page is really the start of my piece. I'm sure I would realize that the first three paragraphs of my latest work are trash and should be discarded. I would certainly have found the correctly spelled malapropism and have realized that I really don't have an ending but that I just tapered off at the end of the last page.

I'm sure, I hope, that I would have found all of these things before I mailed off the manuscript. But I found them quicker after a dozen colleagues read my piece and discussed it with me.

***Jane*:** Specific questions and suggestions, reactions to language and structure, comments on meaning and intent are all helpful to me as I begin the lonely journey through revision. I may decide not to make the appointed changes, but it might also be true that the work of sharing evoked or strengthened my conviction.

Walter: I don't want to make this sound too easy. In truth, the hardest part of being in a writing group can be writing comments on another member's manuscript. When the sentences are clear and the grammar is correct but the piece does not seem to be addressed to me, when I find myself out of sympathy with the tone of the piece, when I find the content of the piece to be thin, I am hard pressed to write anything that the writer might be able to use.

***Jane*:** I occasionally suffer from the writer's disease of extremes (my work is brilliant, my work is trash). Here, the writing workshop can be the voice of reason, pointing out what I have done well, what I need to improve.

***Sandy*:** I think that when you sit in Writing Workshop listening to comments about your precious piece, you may get some global idea of how well your work has gone over. Some suggestions for improving it may sink in. But the emotional intensity of having your creation laid bare to the world and criticized can leave you a little shell-shocked, no matter how diplomatic everyone has made extreme efforts to be. Intellectually you may agree with their diagnostic assessment; emotionally you may be in a bit of a blue haze when your turn is over.

***Diana*:** As a reader, I have learned to be sensitive to the others' feelings and comment accordingly. My comments have changed since the beginning of the course. I wrote about my feelings about the subject or author instead of the content within the piece. Commenting quickly doesn't allow for my personal feelings to be the overpowering message of my feedback. I tend to skip long, drawn-out comments from my peers. I read the short ones first just to give myself an idea about the feelings I'll be getting from the longer comments. Did they like it?

***Walter*:** We learn. I now know more about horses than I thought I wanted to. My ignorance concerning horses, or any other subject about which one of us writes, is not much of a barrier to my being able to make some useful comments on the clarity, conciseness, and quality of the writing. I don't have to know the difference between a fulmer and a fetlock in order to make some intelligent comment as to the clarity of the sentence in which they appear.

***Nancy*:** It was frightening to think of commenting on what others had written. What helped me to gain confidence to do that was actually having it done to my own writing. When others commented, criticized and questioned my piece with respect and kindness, I realized that I could do that too. It really was quite helpful and felt good to have my work being discussed by others who seemed to care about my writing.

***Sandy*:** I find written comments extremely valuable. When the battle fatigue is abating, I can read over comments in a combat-free atmosphere. I can begin to consider adopting the suggestions of those strangers who had the nerve to suggest ways in which I could actually improve this perfect piece of writing with which I had honored them. When I read comments like, "I didn't get this. Was it meant to be funny?" I can more calmly assess the problem of whether it was actually funny or whether I had just missed making my point with that particular member of the group. If several people have noted "I laughed" or "I got lost" at a particular part, I know I've either done what I wanted to there, or lost the majority of my readers. I turn to the front page of everybody's annotated copy of my work, read all the comments, make decisions on which suggestions agree with my conception of the piece and which don't. I can now roll up my impartial editorial sleeves and get to work.

The piece is outside of myself and I can look objectively at it, make logical decisions, and try to get ever closer to the writing goals I aspired to when I joined Writing Workshop.

***Jane*:** A small group of supportive critics can be a stepping stone to the larger world. It is far less a call into the night to submit a poem for publication in a literary journal if it has first been critiqued in a writing workshop. I have the secure feeling that at least a few people have approved my work. I have allies, a line of defense at the gates of rejection.

Nancy*:** Sometimes, what didn't feel so good was a particularly honest comment about my writing that may have been difficult to hear. I learned quickly that, although these comments may have been hard to listen to, they were almost ***always the ones to make the most difference in the revisions that I may or may not eventually make. After the initial bristling, I would think about these comments much more than some of the others and then find that they made the biggest difference in my decision making. I came to realize that this part of the process was what others needed from me as well. It was the piece which would help us to become better writers.

Diana*:** I feel safe at the hands of the others within my group. I know that no matter what I write I will ***always get positive feedback as well as ideas about how to improve each piece. I will find out what made them laugh, smile, or reflect.

***Lorraine*:** Sitting in the classroom, clutching the copies of my piece, I listen to the comments about a professor's previously submitted piece. Most of the comments were positive; a few were negative. I try but can't seem to enter the bantering. I thought to myself that it was a great piece.

The professor takes all the comments in stride and quips, "Well, it's only a first draft."

ONLY a first draft! Am I missing something here? If he can say ONLY a first draft, my first draft must be the final draft of the first draft. Then again maybe his conception of first draft really is a first draft, and the piece my hands are sweating on should be called a 'third or fourth draft.'

Suddenly I realize that this could be a way to swallow the negativism with champagne rather than water.

Then again maybe the scrutiny is gentler if it really IS a first draft.

Slowly I relinquish the grip on my papers and begin handing them out while borrowing a previously noted comment from another professor, "This is an ABSOLUTELY first draft."

SATISFACTIONS, JOYS, SUCCESSES

***Jane*:** Writing coaxes my inner life forward. My knowledge and my longing are given form in my poems. Sharing writing strengthens this process. My thoughts, sifted through another person's perceptions, become more tangible. In a workshop, diverse perceptions merge for the purpose of criticism and reinforcement, and, for me, this anchors the writing process.

Andrea*:** After several rewrites of ***Henrietta Hemoglobin based on fellow workshoppers' comments and suggestions, I tested the piece on students who were in my Hematology class the following semester. After lecturing on the material covered in the paper and assigning readings in the text, I randomly distributed the paper to half the class, asking them to refrain from sharing the work with others. The following day, I gave the entire class a quiz on the material. The students were told in advance the quiz would not be used in their final grade, and they had the option not to participate.

The results of the quiz were surprising. The group that had received the paper received a quiz average of 10 points higher than the group that had not received the quiz. The students were asked to comment on the paper, and all noted the clarity and ease of reading. A few made suggestions for improvement which I have incorporated for use with next year's class. After the quiz, the remaining half of the class received the paper.

Without the support and encouragement of the Writing Workshop group, I would never have attempted writing an educational piece in a non-traditional style. The Writing Workshop experience strengthened my confidence in my own writing abilities. I have proven to myself that I can try new approaches to teaching and be successful.

Diana*:** I still find myself looking forward to the next class as soon as the last is over. Having the liberty to write what and when ***I want to is very powerful and freeing.

***Barbara*:** The joys for me are many.

I get to spend an hour and a half a week with my colleagues. We do not talk about the budget, about curriculum, or about the restructuring of the college system. We talk about our writing. We offer ideas. We laugh. We enjoy one another's company. We get to know each other in new ways. New colleagues feel more quickly at home after they've participated in the workshop.

What's more, I get to talk about writing with a room full of people who ***want*** to talk about writing. What writing teacher could ask for more?

I admit to some private joys as well: I love to hear a colleague suddenly realize how difficult, how unwieldy it is to teach writing. I smile when someone marvels over just how much time it must take to read ***all*** those papers ***every*** week. I enjoy listening in as workshop members learn new ways to respond to someone else's writing, or as they propose a bolder plan for their next piece, or as they begin to expect more of themselves as writers. I like to hear the realization that, in writing, there are few definitive answers, much confusion, many options. It pleases me to share my small accumulation of haphazard wisdom.

Nancy: What I'd like to say, very simply, is that Writing Workshop was one of the nicest experiences that I've ever had. Many things happened to me. I learned that taking a risk is really okay sometimes. You don't always lose. I learned that I can write and there are others who care to read what I have to say. I learned that, for the most part, people are kind and the "criticisms" which I received were positive and given with sincerity. But, most of all, I made wonderful friends who I've come to know as people, not just writers. I found others who cared about me as a person, not merely another writer in the group. Friends would seek me out after a session to discuss a thought or feeling that I had about a personal issue, to encourage and support me as an individual.

I seem to be talking more about relationships than writing. For me, the Writing Workshop experience was a wonderful combination of both. I'd like to say "thank you" to good people who helped make a difference in my life in so many ways.

Diana: I am genuinely thankful to have been able to have this experience. This is the best course that I have ever taken. It is not just about writing and reading. It is about helping others reach their potential in writing but also within themselves. My apprehension has disappeared, and my writing and commenting have flourished.

Jane: When I write, I am a diver shining a light into a watery darkness to discover what cannot be found on land. Sharing writing pulls me back to the surface. The writing group provides the objectivity required to sort the treasure, to judge what is meaningful beyond my borders. ▼

REFERENCE:

Ziegler, Alan. " 'Midwifing the Craft'–Teaching Revision and Editing." ***Creative Writing in America: Theory and Pedagogy.*** Ed. Joseph M. Moxley. Urbana, IL: NCTE, 1989. 209-225.

SECTION II

INSTRUCTORS FACILITATING

THE INTERNET AS A STUDENT RESOURCE

Norma L. Forbrich

The Internet arrived at the New Hampshire Postsecondary Technical Education (NH PSTE) system in October 1993. That's what Commission Rafn announced to the New Hampshire public in various statements to the media. Earlier in 1993 some faculty and staff had had an independent opportunity for exploration on the "Information Superhighway" as the State of New Hampshire generally, and the NH PSTE specifically, investigated its possibilities. During the months after Dr. Rafn's announcement, faculty and staff throughout the system were challenged to bring that reality to our students.

At the New Hampshire Technical College (NHTC) at Claremont in late February 1994 the first two students were oriented to the use of the Internet with the rudimentary tools of Pine, an electronic mail (e-mail) program, and LIBS, a menu-based search tool. As of February 1995, there are more than 235 students using Pine for e-mail and lynx as a text-based World Wide Web browser for researching information.

The growth of student interest has been fueled by experiences of other students and by exposure to daily anecdotes about the Internet in the media. The strength of student interest has been fired by faculty willing to use this new medium as a learning resource for the varied curricula.

Information media might be categorized by the following schema:

		Permanency	Immediacy
		Opportunity for users to *use* material presented	**Opportunity for users to *create* material presented**
Use Limited	**Medium-based**	Printed material Books Periodicals	Broadcast material Audio recording Video recording
Use Unlimited	Data-based	Electronic Databases Data files CD-ROM	Telecommunications Telephony Telecomputing

Traditional education relied on the permanent medium-based resources for initial tools of learning and research. Most of us clearly recall early exercises endeavoring to teach us how to use the library and its print-based resources. More "modern" education endeavored to use the appeal of movies to encourage us to "read more about it." Use of more immediate tools was frequently aimed at sending us back to use the traditional ones. Those of us who recall the early data-based teaching tools (programmed texts?) must admit that many were simply the application of newer technologies to remodel rather than reconstruct, the older print-based tools.

The matrix presented suggests the impact of the user on the resource. The average user may have the least immediate impact on print media, an increasing amount on electronic data-based media, and more direct impact on audio and video. The greatest direct interaction, however, may occur with the data-based telecommunications. As one cartoon canine aptly stated it: "On the Internet, no one knows you're a dog."

The field of technical education requires faculty to prepare today's students for tomorrow's tasks. All too often we approach the job with yesterday's tools. Books and periodicals have an important place in the education of our students, as do film and electronic databases. Our students need the advantages of the best tools available. Electronic interactive tools need a place in their education as well.

Use of the immediate data-based tools, such as those available via the Internet, will promote three key aspects in our students' education:

1. currency of technical knowledge
2. accessibility of the intriguing rather than the merely available
3. equality of resources regardless of location.

Since the advent of the Internet at NHTC at Claremont, each of these aspects has been incorporated into the education of our students in every academic department. The Internet is being used as an adjunct to the classroom and to traditional resources in a variety of courses.

What follows is a summary of usage of the Internet as an adjunct to other educational methods as used by the NHTC at Claremont academic departments.

The General Education Department initiated the general research use of the Internet by making it available to students as an additional research venue. The library and personal experience, previous tools of choice, have been augmented by the wider reach of the Internet.

The Business Department presents communication opportunities in two courses which span the range of its programs. In the Business Communication course, students are exposed to e-mail for business (and personal) use and to lynx, the text-based Web browser, for information searching. Students in the Microcomputer Business Management program are additionally exposed to a variety of networking aspects through use of Internet tools.

The Technical Department is using the internet in five courses across two program areas. The Computer Electronics program incorporates a series of courses on networking technology. Each of these courses requires the students to access the Internet to demonstrate networking concepts in action and to locate current information in these areas using the tools of ftp, gopher, lynx, and trn. The Manufacturing Technology program has used the Internet to access state of the art production information and to examine changes in the manufacturing environment which might be brought about by the NAFTA and GATT treaties.

The Allied Health and Human Services Department has incorporated the Internet as a tool for general reference by faculty and students alike. With the discovery of "The Virtual Hospital," the Respiratory Therapy program has been able to dramatically increase the amount of detailed clinical case information available to its students. An electronic mailing list specific to Respiratory Therapy issues in clinical practice furthers the students' understanding of the "real world" while still in training. The Occupational Therapy Assistant and Physical Therapist Assistant programs have additional access to a vast amount of information on disabilities and adaptation for them from the foremost therapy centers in the world and from the people these centers aid.

The Nursing Department at present uses the Internet for its communication (e-mail) and general reference potentials. The presence of a Nursing Gopher will be a boon to the present and future students in the Practical and Associate Degree Nursing programs.

The faculty, led by members of the Learning Resource Center, have access to discussions about Performance-Based Learning (PBL) as it's carried out and experimented with around the world via the mailing list for PBL. Other resources available include access to ERIC and ERIC digests.

The focus of our interest, however, remains the students. The Internet brings each of them a stronger education by virtue of the initiatives undertaken by the NHTC at Claremont academic departments. But for the students, there are even more benefits:

1. access to a wider variety of library resources
2. access to topic-specific discussions with little regard to one's academic status (faculty vs. student, senior vs. freshman, graduate vs. undergraduate)
3. access to a community of interest.

Our students now have access to more than just the College library or to the libraries within easy driving distance. They now have access to libraries anywhere within the electronic world of the Internet. Granted that most materials are still print-based, the references to them are electronic and can promote interlibrary access.

Through access to USENET news groups via trn, the threaded news reader available on Granite, the students have an opportunity to identify a topic of interest and become involve as others with a similar interest discuss and debate its facets. Although this tool has only been available since the end of 1994, it has already found a wide following.

The most significant use pattern seen in students of the Internet, however, is the use of its "chat" or "talk" potential. This permits two or more participants to carry on a conversation, a real-time exchange of ideas. While I am aware that some "chats" are what others consider frivolous, what excites me most is that the students **are** carrying on the conversations. They are using a tool with no formal or informal demonstration, with no training provided by faculty or staff, a tool that is not mentioned in our student's Internet manual. It is a tool that the students have discovered and transmitted from one to another. Anyone who doubts the capacity for exploration demonstrated by our students has to be encouraged.

In short, the Internet has vast potential as a tool for technical education and education for the workers of this state. In a very short time with few outside resources, the faculty and staff in the NHTC at Claremont have begun to incorporate this Swiss Army Knife of reference tools across the curricula.

It is a beginning. ▼

How to Keep Your Message . . . From Getting Lost in the Medium

William A. McIntyre

In recent years the proliferation of technology in education at all levels has been a hot topic. Some educators see it as a way to help equalize differences in schools by providing capabilities such as Internet access and distance learning. Others see it as a way to enhance self-paced and performance-based learning while allowing for individual differences. Some simply see it as a way to present visual information.

Whatever the reason the use of media in the classroom, especially video and multimedia, is burgeoning, and some faculty in the Postsecondary system are adapting their teaching to accommodate educational technologies. Some faculty are using camcorders to create video either as free-standing programs or as clips for multimedia. This article is intended to be a media primer for faculty who are beginning to produce their own programs and offers some guidelines for shooting better video.

The Technologies

As evidenced by the dramatic success of educational television in the last decade, the line between entertainment and education is becoming blurred, and we are only beginning to tap the creative power of video for education's sake. Video is one of the most widely used forms of communication in the world, and it can be used very effectively in teaching.

Multimedia affords educators a way to provide interactive learning with entertaining glitz that effectively meets students on their own turf. Whether video is created as videocassettes or as clips for multimedia the productions we create not only need to have excellent content but solid technique as well or we risk losing our students' interest. Using new technologies and specifically creating media programs can be very intimidating. Part of the mystique of video and multimedia can be eliminated by knowing more about some of the techniques of video production.

Do We Use Off-the-Shelf Programs and Courseware or Create Our Own?

This is a fundamental question that is best answered by availability. If a commercially produced videotape or laser disc is available, suits our purpose, and is within our budget, it is probably advantageous to use it. There is no point in making the effort to re-create what already exists and most likely is of very high quality - especially in areas like physics, science and math, and health fields. Most production companies have instructional designers and videographers who produce video, graphics, and animation at a level that is very hard to duplicate.

When digital video became affordable, people thought it meant the demise of the analog laser videodisc. The opposite is true. Each year laser videodisc production sets a new record. The clarity and sharpness far exceed videotape, and the large installed base of laser disc players in schools, colleges, hospitals, and industry means that this medium will be around for a long time.

The real growth in laser videodisc sales has been in Level One discs. Level One laser discs only require a television monitor and a disc player and can provide random access with a scanner. Level Three videodiscs work with personal computer software and are interactive. If the content meets our curriculum needs, laser discs can provide a good solution for multimedia courseware without much authoring.

Creating Our Own Media

Although there is no point in re-creating what already exists, there are many times when we will need to create our own media to deliver specific content. When we create our own media, we should consider the following:

1. The Variety of Media:

The computer has breathed new life into still images, video, and overhead transparencies, adding some sparkle to the already familiar. With any kind of media production it is important to produce the type of media best suited for the specific learning situation. Multimedia has the glitz today, but it is often easier to get the point across using media that is easier to produce.

2. The Storyboard:

The first step in any kind of media production is to take an idea and develop it with the learner in mind. The storyboard in a multimedia production is a scene-by-scene or page-by-page description of the content sequences, video clips, hot words, camera angles, titles, sound, narration, graphics, and any other considerations. This is a visualization or a road map of the entire production; it is a way to get it from the development stage to the computer without making false starts and wasting time.

Previsualization is a process that still photographers have used for years. It is imagining what the final print will look like in the mind's eye before ever taking the picture. It requires the photographer to think about lighting, type of film, camera angles, equipment or accessories that may be required, and any technical problems that need to be resolved. Previsualization is a good technique for any king of media production.

3. Your Audience and the Intent of the Production:

It is worth some time to consider who the program is intended for and how it is going to be used. Are there limitations or logistical problems with the equipment that need to be resolved that could hinder the intent or use of the program?

4. Transparent Technology:

A desirable outcome in the use of any type of media is to keep the technology as transparent as possible. One of the basic tenets of any kind of media production is to keep it simple. The effectiveness of any educational media program is in the quality of simple production techniques not overpowering glitzy special effects. **Multimedia should show concepts, not vice versa.** It is possible to make a multimedia program so slick that the message can get lost in the medium.

5. Quality:

The quality of the individual components of multimedia is a key to creating a successful program. The end result will only be as good as the weakest part of the production. This means that the video, narration, sound, graphics, and text must be the best they can be.

6. Copyright Issues:

The various forms of new media have raised copyright issues to protect the intellectual property rights of the owner or originator. Although the Copyright Act of 1976 leaves many grey areas concerning "fair use" with the new media, Section 110 covers how copyrighted works may be shown in an educational (nonprofit) institution, and Section 111 covers electronic retransmission as in distance learning applications. The important part here is "retransmission," and anyone creating a new program who is planning to use copyrighted works would be well-advised to get written permission to retransmit any part of a copyrighted work.

When Video is the Medium of Choice

Video is not expensive to produce, and the tapes can be used over and over. Based on camcorder and VCR sales, video is more popular every year. The problem is that most people's 'home video' is not suitable for educational purposes. We need to be somewhere between broadcast video and the jumpy, zooming, poor lighting, and bad sound video that is the product of too many amateur videographers.

Some Basic Considerations

1. Equipment:

Although camcorders get easier to use every year, they still have lots of switches and buttons. The only way to get familiar with a camcorder is to practice shooting tape. The operator's manual is often difficult to understand, but it gets easier after using the camcorder a few times.

2. Tripod:

As camcorders get smaller, they also get harder to hold steady. The most fundamental piece of video equipment is a sturdy tripod. Although tripods are not always easy to carry around, they will make the image steady. A bouncy image will lose anyone's attention.

3. Lighting:

Ambient light is often sufficient; however, the best results are achieved using supplemental lighting which improves definition and brightness. Be sure the light balance is set on auto or set it for specific lighting situations such as daylight, fluorescent, or incandescent. This will render accurate colors and skin tones.

4. Camera Handling:

Vary your shots between long, medium, and close-up. Don't be in a hurry to use the zoom. Most professionals never use it. The best way to use the zoom is to shoot some footage and pause the camcorder, zoom the lens, then shoot the next scene. Also, pan (left to right movement) very slowly to avoid jerky playback.

5. Sound:

The built-in microphone is for home video where sound gives much better clarity and richness on playback. For better results use an auxiliary lavaliere microphone that clips onto a person's lapel. A wireless microphone can provide good sound for a reasonable cost.

6. Background:

Look carefully around and behind the subject. A cluttered background can be distracting and take away from the subject.

7. Composition:

Many of the same rules of composition apply to video that apply to still photography; it is worthwhile to study them. Simplicity in the scenes is a key factor.

8. Batteries:

Be sure the battery is charged, and take an extra battery with you. Nickel Cadmium (NiCAD) batteries will last about two to three years; after that, they will not hold a charge and will have to be replaced.

9. Post Production:

Editing, titling, and adding sound is usually done during post production. Most of our campuses do not have much video editing equipment, but as we use more video, this will prove to be a very good investment. Digital editing systems which allow nonlinear editing are the current rage. In the next few years the price of the digital systems will decrease to a reasonable level.

The Digital Revolution

Digital technologies are rapidly changing the world. Information technology and new interactive media will have the power to transform the delivery of education, and it is nothing short of a revolution. The Internet is growing at exponential rates that are difficult to comprehend. New opportunities for collaborating and accessing information abound. To position the Postsecondary system for the next big leap two things are planned. The first is fiber optic networks which are a high priority in the Capital Budget. This will create wide area networks and provide remote access to information technologies in all of the classrooms, labs, and offices.

The second is T-1 lines which will provide graphics on the Internet. This will allow us to receive images, video, sound, and even multimedia programs and bring them into the classroom. Parts of multimedia programs can even be saved, combined, and used later. This will open up new opportunities for creating and collaborating on media projects that have previously been impossible.

The use of technology in education will continue and even accelerate as access to information technologies improves. Researchers have repeatedly concluded that people learn and retain information better when visual senses are combined with aural. Since faculty must present a great deal of visual and auditory information video and multimedia are ideal choices for mediated instruction. Faculty who are beginning to produce their own video will enhance the final product by incorporating some of these basic production methods.

REFERENCES

Massavage, Keith. "Digital Video & the Need for Compression." ***Videography***. September, 1994, p. 38.

Shaw, Ned. "Multimedia: It's Cool. It's Big. Watch Out it Don't Fall on You." ***Art Design News***. November/December, 1994, p. 28.

Talab, R.S. ***Commonsense Copyright: A Guide to the New Technologies***. McFarland, 1986.

TEACHING WITH INTERACTIVE MULTIMEDIA TECHNOLOGIES

Doyle V. Davis

> "No compulsory learning can remain in the soul . . . In teaching children, train them by a kind of game, and you will be able to see more clearly the natural bent of each."
>
> — Plato, The Republic, Book VII

A New Mission

The Department of Postsecondary Technical Education has embarked on a new voyage whose mission is to develop instructional strategies which will enhance the ability of students to be actively engaged in the learning process. A major component of this mission is the creation of a learner driven system of education in which students proceed through a series of individual as well as group-based activities designed to develop not only those technical skills necessary to succeed in their chosen field but also the ability to apply mathematics, basic science, and verbal/written communication skills as they relate to their work.

The capstone of this learner driven system of education is an assessment process of those skills defined by the institution and its industry partners as vital to the successful performance of the graduate/employee. A major component of this new assessment process will be a series of performance based examinations in which the student must demonstrate knowledge of these skills by performing them under the watchful eye of an instructor.

Recent developments in ***interactive multimedia technologies*** are redefining the role of the instructor in the learning process. In fact the word ***instructor*** in the phrase "watchful eye of the instructor" in the above paragraph may in some cases be replaced by computers which have been programmed to be highly interactive and responsive to student query and input. This paper will mention a few methods that teachers on the seven Technical College Campuses are using to promote active learning.

Research has shown that it is possible for students to demonstrate "mastery" of concepts and skills through the use of short term memory techniques that will work for them when the standard teaching method is the traditional lecture and the assessment procedure is in the form of written examinations. Yet this same student can not actually perform such skills in the work place. Example: A nursing student may be able to adequately explain on a written examination how to set up an inter-veinous injection and yet be totally inept at actually performing such a procedure. For this reason, the clinical on-site program of study at local hospitals is part of our nursing programs. Many of our technical programs have incorporated such performance-based assessment procedures as part of their evaluation of student learning but many more have not. Performance based learning is particularly absent in many of our general education programs in fields such as English, mathematics, humanities and the natural sciences.

Elements of Intrinsically Motivating Instruction

When I was a physics graduate student, I became interested in what makes someone intrinsically motivated to learn anything - in my particular case, physics. I read about the Keller method of self-paced instruction which was popular at that time. The idea of being able to work at your own pace and take a test when certain competencies had been mastered intrigued me. Although I did not realize it at the time, I am very much the visual type learner who need splenty of hands-on practice and the opportunity to fail a few times at learning something before it gets locked into my long-term memory.

I began to read articles in physics education journals and in particular the work of Robert Karplus, a well-known physics educator at the time. In the early 80s in Berlin, I equipped my physics lab with two Apple II computers so my students could write some simple BASIC computer programs. I noticed that my physics students could not wait to finish their "regular" laboratory so that they could play "games" on the Apple computers which they were using to write some simple BASIC computer programs to analyze data they had taken in their physics experiments. One of the games they enjoyed involved an Olympiad in which they could compete with one another in athletic events such as the broad jump, shot put, and javelin throw. They could control the motion of the athlete by using various key strokes (Mice were not yet available.) They earned points for the longest broad jump, shot put throw, and other activities that involve launching objects. Through the game they learned some physics. For example, it did not take them too long to discover that 45 degrees was the best angle to launch an object to gain the maximum range.

About a year later, I earned some extra income on the weekends working as the part-time manager of a video arcade room. I was fascinated to watch both children and adults try their hand at Pac-Man and other games which required excellent hand-to-eye coordination skills. I often asked myself - "Why can't I generate that kind of enthusiasm in my students to learn physics?" Apparently, I was not the only one to be asking this question. About this same time, Thomas Malone wrote an interesting article in ***Cognitive Science*** entitled "Toward a Theory of Intrinsically Motivating Instruction" . It had a strong impact on a number of educators including Robert Fuller, Professor of Physics and Education, at the University of Nebraska at Lincoln. Professor Fuller has been a leader in the use of interactive multimedia technologies in physics and mathematics education. He is a world-class expert in the use of interactive multimedia technologies to promote active learning and has served as a mentor for me in my work as system fellow in pedagogy. From January, 1990 to March, 1994, NHTC-Berlin shared a National Science Foundation grant with UNL-Lincoln in the development of new teaching strategies using analog and digital video technologies.

According to Malone's research, many educators and learning theorists feel there are three important factors which motivate students to learn. These factors are curiosity, challenge, and fantasy. When students are intrinsically motivated to learn something, they spend more time and effort in learning the material and will use it more in the future. These factors help the student learn "better" in the sense that the student's fundamental mental processes are modified to include the development of the important skill of "learning how to learn".

Curiosity has been shown to be an important motivating factor in the learning process. Learning environments which excite a learner's curiosity by providing an optimal level of informational complexity - neither too complicated nor too simple with respect to the learner's existing knowledge can promote active learning. It is important that the learning process involves the discovery of results which are novel or surprising. This often encourages the student to want to know what is beyond this step in the learning process so they can advance their skills to the next performance level.

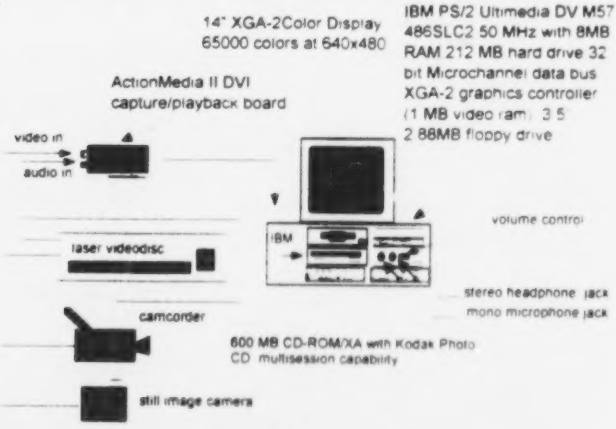
Challenge is another major ingredient in instruction which is motivating. Strange as it may seem, learning situations which provide students with goals whose attainment is uncertain are more interesting to students than those where outcomes are guaranteed. Learning processes which introduce levels of variable difficulty, multiple outcomes, hidden information, and randomness are generally much more interesting to students than those which encourage strictly the memorization of facts. A learning environment is not challenging if the person is either certain to reach the goal or certain not to reach the goal.

Fantasy can make an instructional environment more interesting and educational. By fantasy, I mean the use of themes or story lines with goals. For example, the Smithsonian's popular Minds on Science series of computer-assisted instruction using laser videodisc for middle school students places students in the role of a team of presidential science advisors who must make national science policy. Through problem-solving activities, students learn the science concepts behind these options. Physicians at Dartmouth Medical School use laser videodisc technology linked to an expert medical diagnostic computer system to view a triage situation in a remote MASH unit in the desert. They must make critical decisions based on data supplied by actors playing the role of physicians, nurses, medics, and soldiers in a mock battle situation. In both of these cases, the goal of the lesson is a fantasy i.e. save the planet, the oceans, or the patient. The skills we want the student to learn are used as a means of reaching the goal. - they are not the goal in itself.

The use of interactive multimedia technologies in teaching provide a wonderful way to introduce these three aspects of intrinsically motivating instruction into the learning process. With money supplied by the Department of Postsecondary Technical Education, each college in the system received two multimedia development workstations as shown in Figure 1.

HARDWARE FOR THE DEVELOPMENT OF COMPUTER ASSISTED INSTRUCTION USING INTERACTIVE MULTIMEDIA TECHNOLOGIES

TWO LESSON DEVELOPMEN-T STATIONS ARE LOCATED AT EACH OF THE NEW HAMPSHIRE TECHNICAL COLLEGES AND INSTITUTE.


14" XGA-2Color Display
65000 colors at 640x480
IBM PS/2 Ultimedia DV M57
486SLC2 50 MHz with 8MB
RAM 212 MB hard drive 32
bit Microchannel data bus
XGA-2 graphics controller
(1 MB video ram) 3 5"
2 88MB floppy drive
ActionMedia II DVI
capture/playback board
video in
audio in
IBM
volume control
laser videodisc
stereo headphone jack
mono microphone jack
camcorder
600 MB CD-ROM/XA with Kodak Photo
CD multisession capability
still image camera

Operation System: Switchable between OS/2 2 1 and DOA 6.0 with Windows 3.1

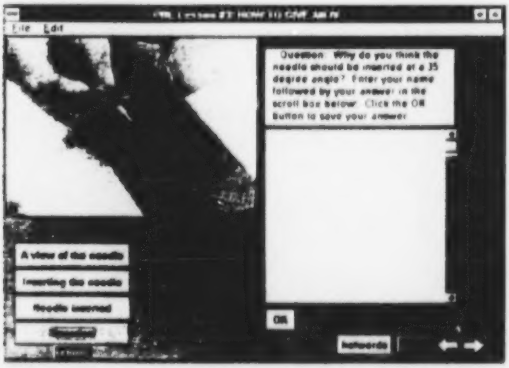
Authoring System: Asymetrix Corp. **MULTIMEDIA TOOLBOOK 1.53a**

Capture Software: Multimedia Presentation Manager 2.0

Figure 1: Configuration of IMB Ultimedia DVI Model 57 PS/2 computer and accessories. The system shown above can capture full motion video at 30 fps and store to the hard disk in a single step using the hardware compression capability of the ActionMedia II capture board. The ActionMedia II playback board uses hardware assist in the playback of the video/audio clip in window sized up to 640x480. The captured files are in the AVS format. A videoshell developed by the author permits data to be taken from the video files. Students can measure distances, angles, mark points, and define coordinate systems at any point on the video image.

These workstations have the ability to play live video through a window on the 14" color high-resolution XGA2 monitor from sources such as VCRs and laser videodisc players. The ActionMedia II card is used to digitize images from these sources. The Canon Xapshot still image camera permits the capture of single frame images. It has recently been used to create a faculty/student database at NHTC-Laconia. Using this hardware, the author has given presentations and training to faculty at each of the seven institutions. Lessons are currently being developed in the areas of automotive technology, biotechnology, metallurgy, physics, logic, and nursing. Using software known as authoring systems, faculty create student-centered self-paced lessons which combine text, animation, video and sound. Generally, each lesson has a menu from which students can select particular topics to explore. This permits the student to "navigate" through the lesson in a non-linear fashion. Teachers can create "hotwords" within the text of the material the student is asked to read. When a student clicks on a hotword with the mouse, additional information can be supplied about that word or phrase. This information does not have to be in the form of text. Such "hypertext" could be a video clip, a single image, or an animation sequence. Figure 2 below shows one page from a lesson developed by the nursing department at NHTC-Berlin on the proper method for giving an inter-veinous injection. The page contains buttons the student can click to see video clips of the various steps including arm preparation, catheter and needle insertion. Notice to the right of the image is a question box and below it space where the student(s) would answer the question. Notice that these technologies do not limit but encourage the use of writing as an important part of the learning process.

Figure 2: A page from an interactive nursing lesson.



Question: Why do you think the needle should be inserted at a 35 degree angle? Enter your name followed by your answer in the scroll box below. Click the OK button to save your answer.

BEST COPY AVAILABLE

Such images can contain hidden information. For example it is possible to create with the authoring system what are known as "hot spots". You might show the nursing student a still image of an arm which has been prepared to receive an injection and ask the student "Move the mouse pointer to the place on the arm where you think the needle should be inserted." Regions of the image (invisible to the student) can be defined as hot spots. If the student clicks on a part of the image which contains a hot spot below it, additional information can be supplied such as "Yes! that is the correct place." or "No, you are too low. You have one try left."

Within a few short years, we will see tremendous improvement in the speed and user-friendliness of interactive multimedia technologies. These technologies will permit the instructor to develop with a team of instructional design specialists highly interactive lessons which will be learner-driven as opposed to teacher-driven . Such lessons will permit students to ready themselves for performance exams by allowing them to practice procedures and exploring concepts with the assistance of a computer. The lesson can be designed to provide levels of variable difficulty, multiple goals, hidden information, and randomness - exactly the types of parameters found in the real workplace. Students can have as many opportunities to fail at the learning task as they like. The teacher becomes a guide on the side, assisting the student to reach the learning objectives. Each student can move at his/her own pace through a series of lessons and provide vital feedback to the teacher and design team about the human interface to the computer. Such a "shared learning" experience can be beneficial to both teacher and student.

In conclusion, let us realize that more and more of our students will come to our seven institutions with strong exposure to the Internet and its vast resources. They will have developed "search and retrieval" skills cruising the Information Superhighway and feel quite at home in directing their own self-learning. They will come to expect similar point-and-click visually-based, hypertextural learning experiences in their courses as they have encountered through their Mosaic browser. We must prepare ourselves for this new way of learning by improving our knowledge of information and multimedia technologies and the ways these technologies can improve our teaching. ▼

REFERENCE

Malone, T. "Toward a Theory of Instrinsically Motivating Instruction" Cognitive Science *4*, 333, 1981

LEARNING FROM INDUSTRY:
An ISO9001 Virtual Workplace

David Miller

Abstract
Technical education systems are being challenged to train students for entry-level positions in industry. The growing complexity of technology and global competition has spawned efforts to identify skills standards that are required for key occupations. Additionally, industries have adopted ISO9000 Quality Management Plans to assure consistent quality and competitiveness of their products. Technical education curriculums must address the demand for students who are competent in the skills standards as well as experienced with industry methods. The ESETCo curriculum plan provides students with industrial quality experiences in an electronic systems laboratory based virtual workplace operated under an ISO9001 Quality Management Plan.

I. The Industry Model.

The education community has taken pride in the comprehensive educational experiences provided to students in preparation to enter the workforce. The rapid employment of new technologies by industry has caused a corresponding demand on educational providers to develop new strategies to prepare workers for participation in the new industrial revolution.

Industry has reacted to the modern demands of global competition in increasingly complex technology based markets by adopting more holistic approaches to the management of resources. Multi-national consortiums, agreements on industry standards, interest in employee training, and the development of quality plans are indications of this new approach.

The difficult task of organizing and managing a company to succeed requires a coherent management plan. The ISO9000 Quality Management Plan has been widely adopted by companies worldwide as a model for organizing the resources of a company to succeed. The educational community must adopt similar techniques to manage the learning environment to support students' development for precisely the same reason - to assure future success.

II. ISO9000 - An Industry Blueprint for Success.

The ISO9000 standards address the issues related to the management of a system to assure that the product(s) of that system will be consistently of a desired quality. These standards define the language, organization, and documentation required to comply with the ISO9000 standards. The ISO9002 document applies to organizations involved with manufacturing, installing, and servicing products or services. The ISO9001 document addresses the areas within ISO9002, but adds the area of research and design.

The twenty areas covered by the ISO9001 document can be grouped into four general areas. Management activities are covered by sections 4.1 Management Responsibility, 4.2 Quality System, 4.3 Contract Review, 4.14 Corrective and Preventative Action, 4.16 Control of Quality Records, 4.17 Internal Quality Audits, 4.18 Training. Research and Design activities are covered by section 4.4 Design Control. Manufacturing activities are covered by sections 4.5 Documentation and Data Control, 4.6 Purchasing, 4.7 Control of Customer-Supplied Product, 4.8 Product Identification and Traceability, 4.9 Process Control, 4.10 Inspection and Testing, 4.11 Control of Inspection, Measuring, and Test Equipment, 4.12 Inspection and Test Status, 4.13 Control of Nonconforming Product, 4.15 Handling, Storage, Packaging, Preservation, and Delivery, 4.20 Statistical Techniques. Marketing and Product Support is covered by section 4.19 Servicing. Thus, the ISO9001 offers a very comprehensive approach to structuring and managing an organization.

III. Adapting ISO9000 For Education.

A draft document, ***Quality Management and Quality Assurance Standards - Guidelines for the Application of ANSI/ASQC Q9001-1994 or Q9002-1994 to Education and Training Institutions***, has been released by the American Society for Quality Control detailing the adaptation of the ISO9001 and ISO9002 standards to educational organizations. The ISO9000 plan can incorporate modern educational reform movements such as National Skills Standards, Performance Based and Collaborative Learning. The impact of an ISO9000 management system on laboratory activities, assessment, and expectations will result in students who are better prepared to contribute to the success of modern industry.

Performance Based Learning is supported by this system in a number of ways. The ISO9001 Training Records act as a portfolio for each student. Team teaching and cooperative education experiences are facilitated by the common perspective of the ISO9001 plan. Student paced learning is implicit in the industry structured program for many of the courses. The industry focus of the ISO9000 learning environment provides a direct interface to industry, university, and research organizations.

A national effort is currently underway to identify the basic skills needed for entry-level positions in a variety of occupational areas. The Electronic Industries Foundation (EIF) and the American Electronics Association (AEA) have developed sets of Voluntary National Skills Standards documents that address the basic skills required by entry-level Electronic Technicians. These Skills Standards were identified by industry representatives through a DACUM (Develop A CurriculuM) process that serves to explore and define the knowledge and attributes needed by workers on-the-job to be successful and productive.

The Skills Standards define the content of a curriculum as well as the attributes of successful workers. However, the process of defining the activities that will provide the exposure to the content and exercise the desired attributes is still being explored. Many approaches have been identified and are currently under investigation.

IV. ESETCo - Putting ISO9000 to Work at NHTI.

One example of the incorporation of an ISO9001 plan within a National Skills Standards based curriculum is the Electronic Systems Engineering Technology Curriculum organization (ESETCo) project at the New Hampshire Technical Institute (NHTI). The ESETCo project will use the ISO9001 plan as a framework for providing a "virtual workplace" for students to explore and participate in a realistic industry simulation while retaining the developmental aspects of a formal learning environment.

The ESETCo project group is identifying the specific curriculum changes that will adapt the ISO9001 management plan to the Electronic Systems Fabrication Laboratory. This laboratory is capable of producing electronic printed circuit board based systems and is currently used for supporting the system design based Senior Design Project courses. In these courses, students identify, specify, design, and fabricate individually defined projects.

The EET program is highly successful at training students for employment at the engineering technician/junior engineer levels. However, a recent survey of alumni from the program shows that many of the entry-level and subsequent job titles involve manufacturing and product support positions. These survey results have prompted an analysis of the strengths and weaknesses of the EET program regarding industry manufacturing and marketing needs. Companies within the electronic industry typically operate departments for Design Engineering, Manufacturing, and Marketing. Each of these departments has a distinct role to play within the organization. These roles are not independent; that is, each department is dependent on the others to support the corporate structure in a manner similar to a house of cards. The ESETCo plan is based on this organizational model.

The ESETCo program is intended to simulate an industrial environment to promote the goals of the National Skills Standards, Performance Based Learning, Collaborative Learning, and TAC/ABET accreditation. Students working within the ESETCo system experience industry standards first hand, leading to a natural progression from school to work.

This project is based on the premise that an effective environment for developing worker skills and attributes is within an industry-style setting. By setting up the ESETCo laboratory as an ISO9000 compliant organization, the students are exposed to industry methods and expectations while still operating under the umbrella of the educational system. In addition, diverse student interests and abilities can be incorporated into a single ESETCo laboratory session, just as industry operates with a variety of cooperating departments and job levels within each department. Thus, students with interests in design engineering can participate in the Research, Design, and Development activities. Those with an interest in manufacturing methods will participate in the Manufacturing activities. Students who are inclined to product support will be involved in the Marketing activities. Within each of the Design, Manufacturing, and Marketing areas, involvement at either the Engineering Technologist or Technologist levels will be offered according to the goals set by the students and their participation will be evaluated using separate assessment standards.

V. Multi-disciplinary, Multi-level Laboratory Emulates Industry.

This multi-disciplinary, multi-level laboratory will be the hub of the ESETCo curriculum. Other courses included in the student's degree program will be incorporated in the ESETCo laboratory using the same system (ISO9001 section 4.18) that industry uses for employee training. The two-semester second year ESETCo laboratory experience will be augmented by first-year student participation in selected laboratories associated with first-year courses. This preliminary experience with the ESETCo laboratory will serve to introduce the students to the advanced program and provide an incentive to master the foundation knowledge that is necessary to perform in an industry setting. Thus, the ESETCo laboratory will remove the grade and course boundaries that serve to isolate students from the global program goals.

Much of the course work will be common in the student selected educational plan, with appropriate activities and assessments applied to determine credit toward the target degree. This is a method that is common in industry, but new to the NHTI system. In industry, employees within a single organization who perform vastly different job functions are routinely assessed in terms of a common standard, wages. In the ESETCo laboratory, students with different functions and goals will be assessed in terms of the common standard, grades.

The logistics of operating the ESETCo laboratory allows each student to pursue an individualized learning plan. This results in small numbers of students pursuing similar goals. In a traditional monolithic educational setting, it would be prohibitively expensive to offer the variety of courses to small groups. However, the nature of the ESETCo laboratory depends on the variety of individual pursuits, just as industry does.

VI. Benefits of the ESETCo Plan.

There are many educational benefits expected because of this plan. Improved student experiences, increased support for the educational infrastructure, and economical implementation of flexible educational programs are some anticipated results of the ESETCo plan.

This plan addresses the needs of the faculty for continuing education. The task of keeping current in specialty areas as well as diversifying through experiences within other Engineering Technology departments can be addressed through team teaching and workload credit for course participation mechanisms. An example of team teaching could be to combine the course experiences of the ESETCo course with the Manufacturing Engineering Technology Statistical Process Control course. This partnership would enrich each program by combining the resources of each program toward a common goal.

Partnerships with industry or collaborative learning programs with university groups will be easier to establish under the ISO9000 organization plan. The established system for managing, designing, manufacturing, and providing support for a product makes it possible to effectively meet the needs of the working partners.

The ISO9001 plan treats the introductory and support courses as Training Providers under section 4.18. This places these courses under the audit process to insure that the activities and course materials are consistent with the goals of the program. Additionally, this plan supports the integration of course work into the program since no course will be run in isolation.

It is a challenge to keep a curriculum abreast of the rapid changes in the electronics industry. The ISO9001 4.17 continuing audit process assures that the program is under continuous evaluation through a formal process. The

Advisory Committee, TAC/ABET, ISO9001 Audit, students (customer), faculty, and administration inputs are all handled by these formal procedures.

The modern movement to increase the involvement of educators in administration functions provides the opportunity to revamp the purchasing procedures for supplies and equipment. The ISO9001 section 4.6 provides industry standard procedures for purchasing. The acceptance of this radical financial empowerment of the ESETCo will be enhanced by adopting this standard. Additionally, national educational support is committed to this type of education delivery system. The competition for financial and administrative support within the educational system is fierce. With this plan, ESETCo is a major player in the competition for support.

The ESETCo plan is a radical departure from traditional education delivery systems. However, it is a practical plan with firm roots in proven industry practice. The products of this plan result in graduating students who have the knowledge and attributes needed by industry, and who have industry-strength work experience in the ESETCo laboratory. ▼

REFERENCES

Quality Management and Quality Assurance Standards - Guidelines for the Application of ANSI/ASQC Q9001-1994 or Q9002-1994 to Education and Training Institutions (BSR/ASQC Z-1.11 - Draft 9/28/94), American Society for Quality Control, Milwaukee, WI.

Raising the Standard - Electronics Technician Skills for Today and Tomorrow (1994), The Electronic Industries Association and The Electronic Industries Foundation, Washington, DC.

Setting the Standard - A Handbook on Skill Standards for the High-Tech Industry (1994), American Electronics Association, Santa Clara, CA.

VACATION REBOUND?

Gerry Doane

Vacations may not be as stress relieving as we think, at least not for college students. An eight year study suggests that the Spring mid-semester break may have a rebound effect which causes students to experience a period of unusually high stress and anxiety.

The study, begun in 1987 at Northshore Community College in Danvers, Massachusetts and continued at the New Hampshire Technical College, Claremont, was conducted to document a discrete period of emotional upheaval which reappeared each year at the same time in the Spring semester. Students in a variety of programs were surveyed weekly. The results show a period of erratic perception of self and one's world which corresponds with a predictable semester time table.

Why The Study

The study began as a result of a disturbing event experienced during my first year as a college instructor in an allied health program. Having sailed through the fall semester with a great deal of work but without major problems, I anticipated an even smoother spring semester. All went well in that semester until we stepped over the midmark. Students returned from semester break refreshed and ready to press on to the semester's end but, within a week or so, their mood deteriorated. It was surprising to hear these usually positive, enthusiastic students complaining about instructors they had praised so highly the semester before. The instructors, they felt, were making unrealistic demands and showing an unusual lack of understanding and support. Students questioned course goals and methodology and their ability to meet the demands. Could it be, I wondered, that the instructors were having a difficult time organizing their courses or were rushing to make up for time they had mismanaged? They appeared to be requiring extraordinary performances from the students. The assignments, homework, tests, all were perceived as being extremely difficult. The students were in emotional disarray and I wondered, "What could possibly be wrong with these instructors?" Then, when these usually positive, enthusiastic students began to complain about my courses I wondered, "What could possibly be wrong with these students?"

The spring emotional upheaval passed as quietly as it had begun. Equilibrium gradually returned and the semester continued to its productive end. However, I was left with a strong impression that I had seen a very real phenomenon and so was alert and watching for its presence the next year.

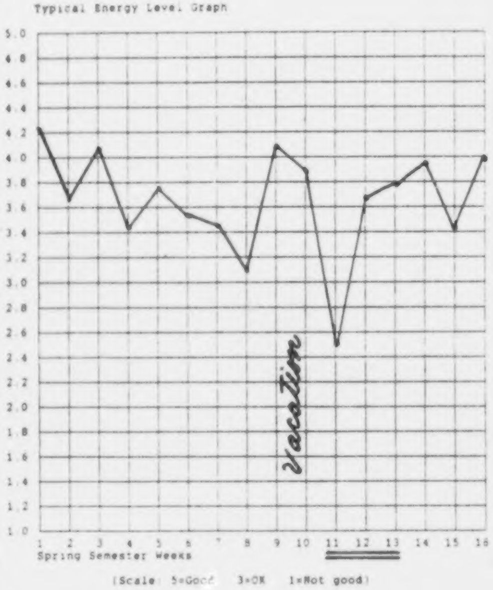
The following fall semester, a small shadow of the spring disequilibrium was noted. But, when mid-spring semester came around, the notation was a loud, "Aha!". There it was again! The complaints, the tears, the expressions of defeat and doom spilled forth and, again, quietly disappeared, like spring snow melting on a rock, there one moment and gone the next. It was time to document, to verify if indeed this was actual, predictable behavior.

The Method

After several years of procrastination, I designed a weekly survey which asked students to rate their feelings in 8 areas: School work, School load, Health, Abilities, Job (where applicable), Future, Energy, and Family. A scale of 1 through 5 was used, with 1 indicating "Not good", 3 indicating "OK", 5 indicating "Good", with 2 and 4 being intermediate options. All responses were voluntary and anonymous. The survey was explained in general terms, with the emphasis on the reporting of spontaneous, "How I feel now", feelings. The words stress and anxiety were purposely avoided in the explanation. Initially, the study was limited to students in the occupational and physical therapy assistant and the respiratory therapy programs. The energy item was thought to be potentially the most accurate in reflecting the student's level of stress or anxiety. This proved to be so.

The Study's Results

The study showed that the students began the spring semester with a feeling of well being but experienced a decline as the semester progressed. The spring break during the middle of March coincided with an interesting change toward a more positive feeling. This was followed by a marked erratic and often dramatic pattern. The specific time of this erratic pattern was a period beginning the second week through the fourth week and resolving by the fifth week. The end of the semester again showed a general, though gradual, decline.



Questions and Validation

The survey data raised many questions. Was the change to day-light saving time with its longer daylight affecting students? Was reentry into more intense light the cause, did SAD (Seasonal Affective Disorder) have a mini-counterpart as we reemerge into sunlight? Was this phenomenon peculiar to allied health students who have a notoriously heavy course load?

To answer that question, I presented the survey to the Northshore faculty and invited interested members to add their classes to the study. Over the next few years, students in literature, radiological technology, accounting, and office technology courses were surveyed. The results were consistent with the earlier findings.

The next question that arose was whether or not the effect was connected with the vacation time. Is it possible that the vacation interrupts the students' study mode and requires extra effort to return to the concentration level required by study? Would this stressful period be seen in a population not following an academic calendar? That question was answered in the negative when the forty plus staff members of the Occupational Therapy Department at the New England Rehabilitation Hospital in Woburn, Massachusetts (where I was a per diem therapist) agreed to take the weekly survey through the period of the spring semester. Their patterns were distinctly different from those of the students, with no dramatic change in energy level or other significant survey items during the periods as seen in students.

The eye of suspicion fell again on the vacation time. If only the vacation time could be changed. And then, it was.

After the study had been conducted for three years, the college moved the spring break to one week later. The survey showed that the disruptive pattern moved to one week later, continuing to begin the second week after spring break.

An opportunity for further validation presented itself when I moved to New Hampshire to teach at the Claremont Tech campus in 1992. I continued the study, initially limited to occupational and physical therapy assistant students, and found the anxiety pattern again repeated.

It is worth noting that although the spring semester holds the most impressive change in perception of self and world, there is a "shadow" of this in the fall semester, as mentioned earlier. In order to document this, the study has included the fall, as well as the spring, semester. This "shadow" also follows a predictable timetable but is less dramatic and of shorter duration. It occurs between the Thanksgiving break and the end of the first week of December.

Other similiar patterns of emotional response can be seen in both semesters. There is a predictable sudden dip in students' sense of well-being during the 3rd and 4th week of each semester. This is not surprising when one considers that this is when we (instructors) give our first tests. Changes in schedules, concurrent tests, major assignments, clinical assignments all are reflected in the survey responses. It is possible to retrace the semester on the graphs compiled from the data, comparing events with reactions.

Another interesting aspect for further study resulted from a presentation to the Tech faculty. A number of the faculty and staff responded to an invitation to take part in a faculty/staff study and so they were included in the weekly surveys. (There had been interest expressed by Northshore faculty but it being a multicampused institution made it very difficult to do a timely and controlled study.) The survey form was adapted, "Work" (general) and "Work load" were subtituted for "School work" and "School load"; "Job" was omitted. The results of that study indicated periods of stress but with a slightly different time frame. For instance, faculty showed a very clear disruption one week ***before*** Thanksgiving as opposed to the students' post-Thanksgiving disturbance.

The fall semester is interesting, but the main focus of the study is the spring semester. It is that semester I would like to address in regard to pedagogic concerns.

Pedagogic Implications

There are a number of pedagogic implications that result from the study.I have found that the high stress period is the time to avoid introducing new, complex course material. It is a good time to review and reinforce, to include hands on activities and to add structure to learning situations. Field trips provide a change of pace that students welcome; guest speakers with well structured, reinforcing formats and low after-demand are also a welcome change. Alerting students to the high stress period, its prevalence (it's good to know it's not just you), and the transitory nature of the period are helpful.

Faculty and staff awareness of this period of stress is helpful. It would be unrealistic to think that being surrounded by anxiety driven students would leave us unaffected. Our feelings and perceptions are influenced by the demands. If we are aware of student stress and our reaction to that stress, we have a better chance of providing stability during the turbulent period. Knowing that the situation is temporary helps greatly.

On one occasion I purposely contaminated the study during the usually stressful time, advising students to get plenty of rest, to avoid making major decisions if possible, to "baby" themselves and to know that these feelings of desperation would lighten within a week or two. This provided only temporary relief, for although the students maintained a steady sense of well-being during the beginning of the period, they took a precipitous fall shortly after. Perhaps continued support would have made a difference.

Unfortunately, this is the time frame when students must make their decisions about withdrawing from classes, a decision made when the future looks the darkest. While withdrawal is appropriate for some, there have been a number of times when I have seen students withdraw who, I felt sure, could have finished the semester successfully if they could have persisted for just a week or two more. But, feeling totally overwhelmed, they could not envision success, and withdrew.

Summary

This 8 year study of emotional stress in students in two 2 year colleges identifies a discrete and predictable period of emotional strain, most erratic and prolonged in the spring semester. This period appears to be related to the spring vacation. When the vacation time moved to a week later, the period of stress also moved a week later. If there is, indeed, a relationship between the two events, it raises the question of why a period of respite from collegiate rigors would cause delayed stress. Also raised are pedagogic questions of how to foster learning during such periods or how to minimize their negative effects

An Invitation

I would like to invite system members to use the survey for their own study. It can be valuable on several levels. It exposes students to research methods; it shows them that research doesn't have to be of Nobel Prize caliber, everyday things are interesting and worthy of study. Also, students have commented that taking part in the survey heightened their awareness of the vacillating nature of their own feelings, certainly valuable insight particularly for those in service professions. I would be happy to provide the survey forms and information to those who are interested. ▼

"TRYING TO TURN THE QUEEN MARY ON A DIME":

Using Student and Faculty Surveys to Facilitate Institutional Change[1]

by Diane Ellis Miles, Neal Steiger, and Maureen Houghton

The Challenge

Although the mission of NH Technical College at Laconia for some time has been to serve the needs of the citizens of the state, the range of learners effectively served has been traditionally, though unintentionally, limited. Traditional education (primarily lecture-based) aimed at the learning style and pace of an ill-defined "average" student, often did not challenge superior students, and left slower students frustrated in their attempt to "catch up" to the "optimum" pace. Furthermore, business and industry had been demanding higher level workplace competencies from its employees, including especially the abilities to meet customers' needs, and to continue to learn. Meanwhile, although state revenues were decreasing, the college was further challenged to keep ahead of the needs of its changing student population.

The Shift in Student Population

Over the past few years, Laconia's population has been both increasing and changing. Between academic years 1990-91 and 1992-93, Laconia's day enrollments changed from 406 to 494 full-time equivalants (FTEs). (In 1994-95, regardless of fears of the effects that major changes might have on enrollments, they were to reach 518 FTEs, moving Laconia from the smallest of the seven colleges to fourth in the system.) With the decrease in state funding to support full-time faculty, increasing numbers of adjunct faculty have been hired to educate and train students. Two other trends were also occurring: the student age range was changing rapidly from traditional high school graduates to adult learners and the gender was gradually changing from predominantly male to female. Between academic years 1990-91 and 1994-95, the daytime male-to-female ratio changed from 1:2.60 to 1:1.98.

Critical to this trend, then, were quality curricula and new instructional methods to respond to diverse learning needs and to increase flexibility without adding physical space.

The approach

Therefore, in the Fall of 1992, the faculty, staff, and administration of New Hampshire Technical College at Laconia, under the leadership of a new president, committed themselves to innovative educational practices to prepare our learners for the needs of the current and future workplace. To address these needs, and in keeping with system-wide goals, members of the college community began a transition to widespread application of an integrated program of student-centered, self-paced, competency-based learning within two years. We knew that this was not going to be an easy task. While we knew in general what our desired outcomes were, we had to design a process that would change existing policies, practices, and procedures. Whereas business and industry can typically make such changes within three years, educational institutions have traditionally taken thirty or more years to do so. Thus, trying to effect change in a college has been likened to "turning the Queen Mary on a dime."

Initial reception to the proposed changes among students and the faculty was mixed. Some expressed apprehension about lack of common understanding and training about the new territory we were entering. Others took a "wait-and-see" attitude. A few openly supported plans for change, while very few openly voiced opposition. Still, we shared several concerns. Was the change going to be worth it? Some of us were quite pleased with the way things had been going; if the existing system wasn't "broken," why fix it? The "new" approach might lead, at least temporarily, to lower enrollments—even the closing of programs. (Both of these concerns have thus far proven unfounded.) What if the nay-sayers got the upper hand? The news media could have a field day if we didn't meet expectations! No doubt about it: this was risky business.

Although there were a few pre-existing models for self-paced learning (Knowles 1968, Tough 1967), we were concerned that these models might or might not apply to our unique situation. We began the process by taking our existing courses and breaking them down into units. For example, a three-credit composition course might be broken down into three units, such as (1) audience and purpose, (2) thinking and writing, and (3) research. For the 1993-94 college catalogue, about 50% of the courses were "unitized"; however, the concept of curricular change based on competency-based curricula with self-paced instruction was already established. Some courses seemed ready-made for this process; others would take more work.

The Postsecondary System Core Competency Fellow and the President collaborated on meeting faculty learning needs so that they could respond effectively to creating the changes. The Fellow provided a 3-day workshop (Surviving the Curriculum Development Process) during June 1993. Faculty members were paid a stipend and provided with materials and supplies.

Eleven faculty from the Laconia college, one from Manchester, and one from Claremont attended. By that September, we would have at least some courses up and running in a competency-based, self-paced format. The process of change had already begun.

The Assessment

For the change to be effective, it had to be driven by carefully assessed needs. Furthermore, the "team" approaches demanded by the workplace demanded that learning include collaborative problem-solving across the curriculum. In a system long driven from the top down, a customer-centered model needed some time to be absorbed into the college learning environment. Customer service took on a new meaning when we began to implement self-paced, competency-based learning, as some students initially expressed dissatisfaction. The question we asked ourselves was, "How do we meet the needs and expectations of our customers while trying to carry out major change in educational practices?" To answer this question, we first had to assess where students and faculty were in their understanding of what was taking place.

To effect this end, a cross-functional evaluation team was formed and facilitated by the Core Competency Fellow. The team's other three members came from staff and faculty representing General Education, Technical Education, and Student Services. Gathering information from students, faculty, and staff, this team developed a tool to measure understanding of and attitudes toward competency-based curricula and self-paced instruction.

The first survey

The first survey was administered in October 1993. It included questionnaires for students and faculty, with three corresponding sections. The first section collected personal data. The second gathered information about past and present experience with and preferences for various instructional methods. The third section garnered open-ended statements about what worked or didn't work.

Questions were aligned to stated outcomes of changes in curriculum and instruction, including:

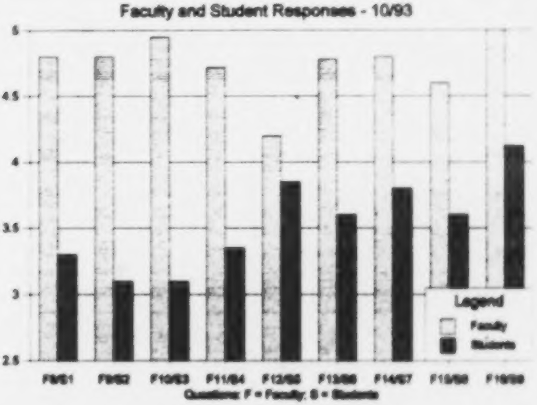
increased self-directed learning
understanding of what self-paced learning is
clarity of instructional materials
connections between course outcomes and individual career goals
clear expectations
a variety of learning experiences (computers, tapes, discussion, etc.)
a classroom/lab environment optimally suited to learning
faculty responsiveness to individual learners

Outcomes were set into a five-point Likert scale (such as, for students, "I have actively sought resources in and out of the classroom to ensure my learning . . . Strongly Disagree . . . Strongly Agree"). Faculty rated both their own parallel competencies (such as, "I have actively sought resources to assist me with curriculum or course development . . .") and their perceptions of their students' corresponding needs ("Students need to seek resources in and out of class"). The rationale for this design was to compare expectations of students' performance with faculty self-assessment and student assessment, to increase access to learning resources, and to improve future performance.

What we learned the first year

From our faculty, we learned what they needed to know, do, and have in order to set up the new methods more effectively (for example, adequate materials, opportunities to learn how to develop and carry out the model, time to develop materials, and opportunities to visit other sites using this method). And, from our students, we learned what the faculty (and college) needed to do to make the new methods work (for example, benchmarking, orienting students to self-paced instruction, providing all course materials at the beginning of the first class, etc.). A common theme in what both the faculty and students liked about competency-based curricula and self-paced instruction was the flexibility and opportunity to move at one's own rate of learning. Both faculty and students expressed a need for more audio-visual and technological learning resources.

On the survey, questions numbered 8-16 on the faculty questionnaire correlated with questions 1-9 on the student questionnaire. The graph illustrates the disparity between the perceptions of the faculty compared to those of the students:



BEST COPY AVAILABLE

Phase Two

Among needs identified through the survey were faculty and staff development, as well as orientation of students to a significantly different learning environment. The Core Competency Fellow collaborated with administrators, faculty, and staff to design a process to close the gap between faculty perceptions and student perceptions. The resulting plan was a five-fold approach from Fall, 1993 through Spring, 1994:

1) each faculty member was provided with a copy of Dr. Malcolm Knowles' Self-directed Learning (1974);
2) Dr. Malcolm Knowles accepted an invitation to participate in a dinner discussion with Laconia faculty, staff, and administrators;
3) Dr. Knowles provided an all-day workshop for the college, System, and New England region;
4) processes were begun to change the students' orientation to the college; and
5) processes were begun to develop a common curriculum format for college-wide use.

Evaluation of Malcolm Knowles' workshop

From the evaluations from the workshop, further learning needs emerged. Faculty, staff, and administrators needed to

1) experience a competency-based, self-paced learning environment;
2) practice developing the components of competency-based curricula; and
3) develop expertise in changing methods of instruction, assessment, and evaluation.

By late Spring 1994, the Core Competency Fellow began designing a series entitled "Performance-Based Learning," structured within a competency-based, self-paced framework. The purpose of this design was to help faculty, staff, and administrators to learn the key elements of educational practice within a competency-based framework (curriculum, instruction, assessment and evaluation) and to experience this learning environment for themselves. The series was divided into three separate units (Different Learners Learn Differently, Assessment and Evaluation, and The Learning Environment) with each containing a variety of related modules. Faculty, staff, administrators, System Fellows, and Central Office staff have participated in providing workshops.

Student learning needs

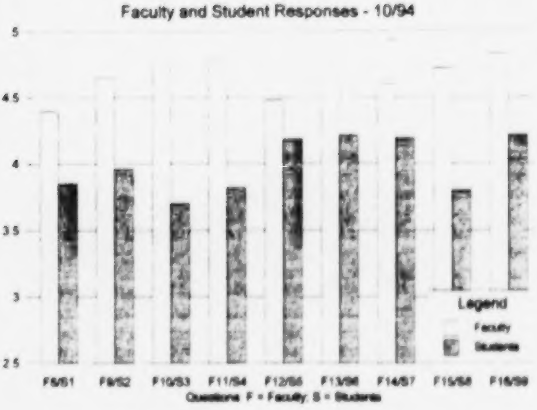
While evaluation results were being converted into staff development programs, plans went forward to address corresponding student needs. We had learned that students were not prepared for the change they were to experience and therefore were uncomfortable. Returning second-year students as well as incoming freshmen expected the traditional approach to education but were faced with innovation rather than tradition. Clearly students needed to be fully oriented to NHTC-Laconia's educational practices before sitting in any class. To accomplish this, three things were done.

1) Students visiting the college were given an explanation of self-paced, competency-based education. A statement explaining the changing educational practices was also published in the college catalog and the student handbook;
2) The summer orientation was redesigned so that students would not only be informed about these changes in educational practice but also experience these practices. This experience would allow them to better understand what to expect when their classes began.
3) Students participated in another orientation when they arrived in the Fall of 1994. This orientation more intensely explained the educational practices they were about to experience. Using some of the same modules developed for performance-based learning, students were exposed to the same information and experiences the faculty had.

What we learned the second year

The Fall 1994 Student Evaluation suggested that we had already made some progress. Students were more knowledgeable about the changes we had made. They knew what to expect and therefore were more comfortable. This knowledge and comfort now challenges us even further. Students are beginning to take the responsibility for their learning and in doing so are more actively expressing their satisfaction and dissatisfaction with services, in and out of the classroom. We are challenged on a daily basis to meet the changing needs and expectations of our students, and to continually raise the level of customer service that we provide.

With processes implemented to facilitate changes in practice, the Faculty/Student Evaluation Team reorganized and conducted its second evaluation during the Fall of 1994. Perhaps most encouraging was that the processes of change and implementation strategies were, possibly, beginning to be reflected in the evaluations. Comparing the following graph of 1994 survey responses with the previous one, we saw that the gap narrowed significantly (<0.5 Likert intervals) between faculty perceptions and student perceptions about the changes in curriculum and instruction.



Furthermore, students' acceptance of alternative learning has increased. While the percentage of students desiring only non-traditional methods of instruction (19%) remained constant between 1993 and 1994, the percentage of students desiring a combination of non-traditional and traditional methods of instruction increased from 49% (1993) to 65% (1994) while the percentage of students desiring only traditional methods of instruction decreased from 31% (1993) to 16% (1994). A comparison of the two annual surveys suggested that a significant change in attitude, understanding, and implementation had taken place.

The Next Step

While we are "on our way," we have not completed our work. Through the targeted use of Carl Perkins funds to support the integration of the Core Competencies, all funds were allocated to increase technological and audio-visual resources, as well as funds to support faculty learning. Cross-functional teams (such as Institutional Research and Development Team, Professional Development Team, and Core Competency Implementation Team) are focusing on changing the learning environment.

Some plans include:

1) Conduct an impact study of the different implementation strategies for "what works and what doesn't";
2) Develop strategies to integrate collaborative learning activities within a self-paced instructional framework; and

BEST COPY AVAILABLE

3) Continue listening to our customers—both internal and external—to remain responsive to the current and future needs of our workforce and society.

Summary

The process of changing educational practice in higher education is challenging; it requires clarity, persistence, and belief in the need to change as the workplace shifts from an industrial economy to a technological, informational, and service economy. Perhaps the faculty and students at Laconia have not "turned the Queen Mary on a dime," but we have begun a new direction toward becoming a high-performance learning organization, optimally responsive to the needs of our customers: students, business and industry, the community, and the state. The central role that evaulation plays in such a process can not be overstated. Such a process has many potential risks—discouragement, isolation, and even failure—but we have met the challenges of the first two years, perhaps as most adult learners do, with a mixture of fear, denial, curiosity, ingenuity, and persistence.

Through evaluation, the faculty, staff, adminstration and students at Laconia have facilitated change, creating curricula and services custom-designed for the needs of our customers. This process is a never-ending one, for improvement is not an end in itself, but a constant check against complacency, especially in education, a field that must continually change to meet future challenges. ▼

WORKS CITED

Knowles, Malcolm. Self-Directed Learning: A Guide for Learners and Teachers. Englewood Cliffs, NJ: Prentice-Hall, 1975.

Tough, Allen. Learning Without a Teacher. Toronto: Ontario Institute for Studies in Education, 1967.

NOTE

[1] ZMACNormal

EXPERIENCING AGING:
The Elderly Simulation Lab

Donna T. Gagne

Currently, people age 65 years and older comprise 12% of the nation's population. By 2020, this percentage is projected to increase to 17%. Within these figures it is important to note that the fastest growing population among the elderly is the 85 year old and older (Jacobson, 1990). Multiple economic and social factors have contributed to the aging of American citizens now apparent in the population statistics. Americans have enjoyed greater access to health care, have benefitted from advances in science and medical technology, and have assumed greater responsibility for healthy living practices.

This shift in demographics has important implications for nursing and nursing education in particular. In every health care setting, the nurse will inevitably come in contact with the elderly. To address the unique health care needs of the older adult, nursing programs have incorporated gerontology into the curriculum. A review of nursing literature reveals a wealth of information on curriculum models, course content, placement, and the selection and utilization of clinical sites (Taft, 1986).

Nursing educators realize that students must have a firm knowledge base of the physical and psychosocial changes associated with the normal aging process. Students continue to build upon this foundation with the integration of geriatric considerations throughout course content. It is imperative for students to acquire the knowledge they need to care for the elderly effectively. Yet, it is equally important for students to examine their attitudes and feelings toward aging. The goal of both cognitive and affective learning was the motivating factor for the development of the Elderly Simulation (sim) Lab.

Prior to the lab, the students attend a lecture on the normal growth and development of the older adult. They then proceed to the elderly sim lab which is designed for students to "experience" the challenges associated with aging as presented in class. Working in pairs, students proceed through various stations which simulate sensory changes in vision, hearing, and tactile sensation. Each station has appropriate "adaptive" devices such as cottonballs and industrial ear protectors, goggles lightly coated with vaseline, yellow tinted sunglasses, and well-fitting cotton gloves. With the adaptive devices donned, the "elder" is requested to complete a variety of tasks. These include daily activities such as reading the local newspaper's Senior Page to determine the date, time, and location of a function, writing a check, listening and responding to questions or instructions, and managing their medication regime with pills of different colors, sizes, and array of child-proof caps.

The final station simulates the motor and visual deficits which an individual who has had a stroke may experience. Velcro weights are applied to the student's dominant arm and leg to simulate hemiparesis. Goggles taped to reflect the visual impairment of hemianopsia are worn. Simple tasks of feeding, dressing, and ambulating are then encouraged.

At the completion of the lab, the students describe the impact these deficits have on mobility, independence, safety, and self-image. Problem solving to enhance functional ability and to promote independence are discussed. The students also share their perceptions and feelings encountered as an "elder." This encourages further dialogue on methods to maintain or promote self-esteem and dignity.

The response by the students to the elderly sim lab has been extremely positive. They are engrossed in the activities at each station, supporting and encouraging one another. They readily share their feelings and insights regarding the experience of "being old." The lab evaluations submitted by the students reflect an increase in the students' sensivity and awareness of challenges associated with aging. Students have ***thanked*** faculty for this learning activity and the insights which they have gained.

By incorporating theoretical concepts of aging with experiential learning modalities, students assimilate more than knowledge. Critical thinking, problem solving skills, and awareness of their values and attitudes toward aging are achieved through this lab experience. Educators know that experiential exercises augment learning, and active participation increases retention of concepts (Sprengel, 1994; Swendsen Boss, 1985). Although the lab can never imitate the true degree and impact of changes associated with aging, each station allows the student to "walk in another's shoes." The insight gained through this lab has been transferred to clinical practice as one student assigned to a nursing home resident noted, "During lab I felt only a fraction of what my resident with a stroke must be going through." That glimmer of sensitivity, empathy, and caring is one reward of teaching and developing innovative instructional strategies. ▼

REFERENCES

Jacobson, Joan M. (1990). Nursing's response to the aging population. ***Home Healthcare Nurse,*** *8*(3), 24-27.

Sprengel, Ann D. (1994). Learning can be fun with gaming. ***Journal of Nursing Education,*** *33*(4), 151-152.

Swendsen Boss, Leslee A. (1985). Teaching for clinical competence. ***Nurse Educator,*** *10*(4), 8-12.

Taft, Lois B. (1986). Teaching gerontologic nursing. ***Nurse Educator,*** *11*(3), 11-14.

READING RECLAMATION

Denise S. St.Cyr

Theodore R. Sizer, chairman of the Coalition of Essential Schools, postulates that this nation is in the vanguard of a growing education reform movement. There are a galaxy of changes that will greet the 21st century. Yet, the more things change, the more they will remain the same. One of these is the crying need for students to read, to read more, and to read critically, not with jaundiced eyes but with discerning eyes. The staggering rise in the number of illiterate people in this country buttresses this need.

This places a special burden on all students. They are caught in the web and fast pace of the McDonald's-Burger King world. Competing obligations in their lives beg from them organized flexibility that requires ambitious effort to even read their local newspapers. They are acutely aware that they are in a very vulnerable position of paralyzing proportions. Some of them even unintentionally flirt with failure. This causes a constellation of incongruity in their lives.

Educators' moving arguments signal the need not to pathologize the issue, but to advance it in such a way that students might benefit. Student lack of reading time and critical thinking skills prompted this writer's "preamble" to her students' courses.

To my students:

On August 22, 1994, Dr. Patrick Roche addressed the faculty. He set our wheels in motion as he shared some of his thoughts with us . . . all of which concern you, my students. One in particular begs for your attention. It is the topic of reading. We (yes, I am guilty also . . .), sometimes spend precious little time reading . . . even though it is vital to our success.

To begin to remedy that, I have committed to encourage you to read more. For some of you, this will be a challenge because of time constraints thus, I include sustained reading and cumulative reports in this course. My hope is that you will develop a strong interest in reading and acquire a better vocabulary as you glean new knowledge from this activity. Your writing then, hopefully, will be grounded in critical thinking.

With this in mind, students are required to read thirteen articles in specified areas over a period of thirteen weeks (one each week). They must then submit a packet of four article summaries and positions at the end of each four week period. The last packet is comprised of five units. Each "group" is worth one grade.

Rather simple, the format requires certain basic information. It looks like the following:

READING RECLAMATION Report Format

Title of Article: ______________________________

Author of Article: ______________________________

Publication: ______________________________

Publication Date: ______________________________

The report must be at least one page, one side, double spaced, typed/word processor. The summary must be in the student's own words.

The students' ***major area of concentration*** opens this exercise. This helps to bridge curricular continuity. Because the topic of ***education*** often stands indicted in the eyes of the public, it is a popular one, especially among non-traditional students, older learners, and parents. ***Entertainment*** and its expressive modalities form another assigned theme. The ***economy*** and its vertical aerobics seem to make little sense to students who struggle to stretch every dollar thus, it too is a favorite subject. Because health issues continue to remain a sore spot in most people's minds and because they affect everyone, the topic of ***medicine*** is particularly appropriate. ***Communication*** is yet another pivotal point of this assignment. Students begin to recognize and to acknowledge that their own skills in this area have gone untapped or have fallen precipitously from one level of functioning to another.

Students are also required to examine such issues as ***political platforms*** to make informed decisions and to arrive at logical conclusions. The emergence of the ***women's movement*** has changed the fabric of society. More than just a campaign or a crusade, it has been a burning issue in many communities and in the workplace. When students explore the subject of ***marriage***, they realize that it embraces a commitment to values. Students report that the subject of ***divorce***, when studied during their reading, sometimes has caused them to perceive themselves in a different light. ***Drugs and alcohol*** are controversial topics which students also must investigate. They seem to be both fascinated and frightened by "appetites" that can cause people to become derelict in their daily responsibilities.

The mercurial highs and lows of ***self-esteem*** and ***sports*** are also plumbed. The order in which any of the topics are presented is at the discretion of the instructor.

If students indicate that they are barren of ideas for their READING RECLAMATION summaries and positions, the following critical thinking ideas could be presented to them. It is important that students realize that these are only guides.

Education: Where does education begin?
Who is most responsible for the quality of a person's education?

Entertainment: TV Sitcoms--Are we watching ourselves? (Atwan)
How real are the problems on TV sitcoms? (Atwan)
Do television and music promote "packaged dreams"? (Atwan)
What social and cultural trends evolve from entertainment? (Atwan)
Does entertainment reflect society's values?
Is music a menace/a means?

Economy: How does it affect you/your family?
Who is responsible for the economy?
Creative solutions?

Medicine: New devices . . . new innovations.
One for all . . . health care reform?
AIDS: Is anyone safe? Protection? (Atwan)
Lynne Gold: I know who I've slept with . . . but, how do I know who they've slept with? (Atwan)
Mandatory AIDS testing? Rights and responsibilities.
The way we were . . . the way we are . . .

Sports: Are they only games? Spirit/spoil?
Significance of sports to American people. (Atwan)
At what cost?

Communication: Parents and teens
Employer and employee
Industry
Innovations
Values
Open doors . . . open minds
Consumer and authority

Politics: Right to vote . . . responsibility to vote
Causing change within the system
Active involvement
Passive involvement
Candidates
American institution

The knowledge explosion of the 90's requires critical thinking of everyone. As in learning a musical instrument, the more students "practice" this exercise, the more they will be inspired and enabled to assimilate critical thinking into their lives and to fan a fiery debate.

Francis Bacon once said: "Reading maketh a full man, conference a ready man, and writing an exact man." In order for students to validate reading, in their own minds, they need to feel that it will be useful to them. "The first object of any act of learning . . . is that it should serve us in the future." (Jerome Bruner) ▼

ADVANTAGES OF ENGAGING STUDENTS IN PERSONAL WRITING

Francesca Fay

Too often students enter my first-year English composition course with such comments as "I hate English," "Writing is boring," or nervously with "I'm no good at writing," or "I'm going to need a tutor." One part of me wants students to feel comfortable enough to voice their honest thoughts; another wants them motivated and at least somewhat confident that they can succeed. Although not every last student will become motivated and do well, a great many do become seriously engaged in their writing, learn to value their expression, write well and know it.

The most critical component to getting students to write well and to want to write is to encourage them to write about things that matter deeply (preferably passionately) to them. I provide a simple set of rules consisting of four P's: no plagiarism, no pornography, no hate propaganda and (because it is a prose composition course) no poetry. Anything else is fine; let students decide to write fiction or nonfiction, an essay, short story or a letter, just so they choose topics that fire their passions.

When greeted with "I can't think of anything," or "I wish you'd assign something," I begin a dialogue asking about their interests, what really matters to them, what they find themselves thinking about most, what really makes them mad. Sometimes as a result of these exchanges, students find the topic. More often though, students go off thinking and then discover what they want to say. Mothers of young children are often fired up by the idea of writing their children letters that will be read years in the future. These parents choose to write about where life has taken them and where they wish to put their energies in the future. Many students have experienced serious trauma of one sort or another and choose to write about the effects of these events.

Some students write about some aspect of a sport or music or another topic that is not particularly emotionally laden, although of great interest to them. More often, students write about highly emotionally charged issues and experiences. One woman wrote about being raped by her 14-year-old brother when she was ten and then about the long period of intimidation and abuse that followed. Others write about drugs, rehab, and friends dying of hepatitis and AIDS. Domestic violence, grisly car accidents, fights and stabbings find their way into student papers. Initially, I was shocked by some of these papers; I am no longer surprised.

Fascinating things happen when students write about subjects that are very important to them both from a writing perspective and from a personal one. First, the fear and dislike of the writing process go away; they become caught up in their work. They no longer see themselves as slogging their way through an English paper; they are telling a riveting, even vital, story. Stilted, awkward, halting phrases are replaced by fresh fluent prose. Beginnings, middles, and endings tend to flow easily and naturally because the writer very much wants to be understood. The writer takes control of the writing. Grammar and punctuation improve dramatically. Confidence almost always improves as learners feel themselves in control of the writing process.

Some might question this approach and ask, "Aren't you opening Pandora's box? Might students become emotionally unraveled? Isn't it crazy to bring up the placement of semicolons and commas when the student is discussing such highly charged topics?" Remember, no student is ever told to write about a particular subject; the student makes that choice. When I receive a piece of writing about a traumatic experience, my first response acknowledges the seriousness of the subject with something like "This seems like a truly ghastly thing for you to go through, are you okay with this?" or "Is someone helping you deal with this?" If a referral to the college counselor or the local mental health facility were indicated, I'd certainly provide it.

Sometimes when students write about very personal intense matters, I do modify general course requirements a little. My students are expected to peer edit, and I sometimes read good student work aloud to the class. When students write highly potent material, sometimes it is not appropriate to read it before the class even with the student's permission. Understandably, when students write about awful events they have been a part of, they may not want classmates to edit their work. I don't excuse them from the peer editing process, but I do say find peer tutors who will be supportive as well as very honest in providing editing feedback. These students find friends, neighbors, and relatives to provide these qualities. Almost invariably, they find additional emotional support and an honest editor.

As for mechanical errors and other general aspects of editing, once students find their voices, they want the voice to be effective, and they will edit accordingly. Just as professional writers value good editors, so do these writers. Self-confidence increases rapidly. Social isolation decreases dramatically. I notice that students who have been through similar experiences find one another, support one another. Additionally, when college workshops and support groups focus around such issues as stress, self-esteem, and domestic violence, I make sure students are aware of these offerings.

Students know their English teachers are not mental health professionals, but they can be basically supportive human beings who wish their students well. Generally teachers know from experience that students who feel empowered do better academically. Encouraging students to write about things that matter deeply to them contributes to their sense of personal worth and control. After students have written from personal experience and deep conviction, they frequently choose to write their required research papers on the same topic. I encourage them. True, they often need help to step back from personal experience to be impartial research writers, but they do make this transition. In the research process, they discover their own expertise; they find the research fascinating so they read widely and well, more broadly and in greater depth than if they were researching topics of less vital interest to them.

Other things happen when students tackle heavy issues. They frequently develop a special kind of trust and openness with the instructor. Many stop by often, long after finishing the course, to tell me how they are doing. Not infrequently, students ask me to help them edit letters to judges about visitation rights or other issues that have found their way into the courts. I gladly take on these small tasks and feel that students truly come to understand the power and use of written language as well as finding resources to help them accomplish their objectives.

Engaging students in the writing process is assisted by a few other simple measures like not grading a draft until the student wants it graded and allowing students to resubmit drafts for higher grades (except at the very end of the semester). If possible, have students use word processors with spell and grammar-check systems; these tools help students feel more confident about their writing and ease editing. Most students now come to the college with word processing skills; those that do not can easily be taught. Attaining computer literacy also adds to self-esteem and competence.

In summary, student motivation and writing skill increase greatly when writing teachers encourage students to write about topics they feel passionately about, allow students to resubmit drafts for higher grades and when students use word processors to spell and grammar-check their work. Additionally, self-esteem improves and instructors enjoy a closer, more positive relationship with students. ▼

THE ART OF THE LECTURE IS IN THE PERFORMANCE

Paul Marashio

From the cacophony of student voices careening off the beige cinder block walls of the lecture hall, one student above the others complained for maybe many students: ***"Humanities! Why do I need humanities to be a _______________?"*** *Fill in the blank with any career.*

On this first day of classes, the one hundred animated students impatiently waited for the lecturer. Momentarily a cleric, dressed in a black monk's robe and cradling under his right arm the ***Bible***, ***Confessions***, and ***The City of God***, entered the rear of the lecture hall, slowly making his way down the center aisle to the front of the room where the podium stood. Silence gently pushed the fretful voices aside, and the surprised students quizzically stared at the holy man. As the monk pulled back the hood from his head, a smile creased his lips; then his evangelical voice caressed the room. "Brothers and sisters. I am Augustine. I do not propose to keep you very long . . . I, whom God favors . . . came as a young man to [the] City [Hippo] . . . I had abandoned my worldly ambition and refused to be what I might have been."

Whereupon the guest lecturer from 400 AD, referring to ***Confessions***, candidly told the students of his early years of sin, and of what life was like living in a decadent Roman Empire, with the lecture's emphasis on his stern theology thoughtfully written in the ***City of God***. With ten minutes to spare, Augustine called for students' questions and dialogue. A lively exchange ensued!

The additional lecturers in the weekly lecture series - Socrates, Galileo, Michelangelo, Newton, Darwin, Marx, Einstein, Pollack - also move the students from passive receptacles to active participants. For example, both Michelangelo and Pollack include the students in the lecture by asking them to share what they are seeing in a specific work of art and whether they appreciate what they are seeing. During these two lectures, the artists challenge the students to move beyond the paintings' surfaces to identify the specific details they see in the art pieces, thus including the students' responses as an integral part of the lectures. At the end of any lecture, the students scatter in various directions in animated small groups, discussing the lecturer's presentation. Toward the front of the room, a small group of students gather to further question the lecturer.

These lecturers breathe life into the dead past by merging both past and present into timelessness and by making complex ideas more accessible to the students. Consequently the students' learning is elevated to an even more obtainable level where they can more easily grasp and better understand the challenging thinking of the resurrected lecturers.

During the weekly lecture series each lecturer outlines the prevalent thinking for the Epoch, and each builds on the previous lecturers' ideas; St. Augustine's lecture emphasizes the God centerness of human existence as a base. Galileo presents the first scientific challenge to theology with his proof of Copernicus' heliocentric theory of the universe that toppled earth and consequently humanity from the center of God's perfect creation. Michelangelo's Lecture reinforces the theme "man the measure of all things." Later Newton discusses how his scientific findings on motion and gravity reconcile theology and science once again. An even wider chasm between theology and religion results with Darwin's theory of evolution and Einstein's Theory of Relativity. The last lecture by Jackson Pollack emphasizes the powerful influences of Darwin, Einstein, and Freud on twentieth century artists who dramatize a frenzied, chaotic world where the center does not hold and where, apparently, humanity places greater faith in technology than in God. Each speaker presents the theme of the impact of humanity's displacement from the comfortable, secure, and reassuring center of the universe to a satellite revolving on the outer edge of the universe. The theme, humanity's search for order, harmony, and balance, is woven with the search for personal values. Another refraining theme in the lectures is that chaos and destruction in the world is man made; consequently, only humanity's intelligence wisely used can save humanity from an apparently impending apocalypse.

The intended fallout from the lectures is to excite, entice, ignite the students' curiosity in the great thinkers and ideas of Western Culture, and to reinforce the image that we stand on the shoulders of those who preceded us.

With this intellectual preparation, the students encounter other great thinkers in the two-hour seminar block where they engage and collaborate with their fellow students in a conversation on these great ideas.

As the buzzing students ambled from the lecture hall leaving St. Augustine behind in his time warp, that one complaining student said, **"I can't wait until seminar to discuss these ideas further."**

For the lecturer creating lectures that engage students in learning is exciting, challenging, stimulating, inspiring, and rewarding. With this flow of creative energy given to each lecture, the lecture's drama engages students into a discourse that invigorates their intellectual curiosity with a desire to learn. Such a creative tack toward the lecture also challenges the students to get involved, to come to the table as active learners who take charge of their learning. Also, the instructor feeding off the students' enthusiasm in turn becomes re-energized for the next performance. With this dynamism, the lecture will gain respect from both instructors and learners. This is why I strongly believe the art of teaching is in the performance. ▼

THE CS GRADE:

A Child Poised for Adulthood

R. Allan Dermott

I was introduced to the ***CS*** grade ("continued study needed") when I joined the English Department at Frostburg State University in Maryland. Freshman Composition was a competency-based course. The ***CS*** was given instead of an ***F*** to any student who could ***not*** write at least a ***C*** composition for the final exam but who had turned in all assignments and had been present 90% to 95% of the time. While at Frostburg, I immediately adopted this grade for my reading and study skills courses. During the past ten years, the ***CS*** has spread across campus to all general education courses. The reasoning told to me was ***that the faculty wanted to tempt students into taking courses that the students feared in order to expand the educational horizons of the student body***.

When I changed my pre-tech language and study skills courses over to a competency-based approach four years ago here at New Hampshire Technical College at Manchester, I also requested the adoption of the ***CS*** grade. Being a new concept to New Hampshire, naturally it met with some reservations and some resistance. At first, it was accepted as a glorified Incomplete grade but without the twelve-week restraint of the ***I*** grade. However, during the second semester, the only students appearing on my rosters were a few new ones and those repeating because they had earned ***F***'s. All those who had received a ***CS*** were required to attend my classes. But without their names on my rosters, I had no idea at first which ***CS*** students were to attend which sections of a course. Furthermore, the short lists on my rosters made it appear that I had only a third of the workload that I actually had. To make matters worse, the college lost about $6,000 that semester because students don't have to pay to finish an incomplete course, even though they have much more work to complete than is usually allowed for an ***I*** grade. With the pre-tech program at Manchester growing and the ***CS*** grade expanding soon to the pre-tech math, the administration did not want to lose further revenue, and so the next fall the official ***CS*** grade was born in New Hampshire.

With the ***CS***'s humble birth in a manger in Manchester (please don't chuckle too hard!), the child is now ready to become an adult. Let us examine together at least two areas that can benefit from a ***CS*** grade – any competency-based program and the general education courses – and then note those benefits.

THE *CS* GRADE AND COMPETENCY-BASED APPROACH

First, the disciples of the competency-based approach should not overlook how well the ***CS*** grade can serve their programs. To begin, let's review the purpose of competency-based education to see how the ***CS*** can be helpful. For one thing, this approach makes adjustments for people who enter college with varying degrees of knowledge and understanding gained from high school or experience.

For another thing, it recognizes individual learning rates for different subjects. We simply don't all learn every subject at the same pace. For example, in mathematics some students devour numbers, even word problems, but some others must work at understanding exponential expansion or figuring out how and when to use ratios to solve problems. But the students who eat up numbers may suffer from indigestion in the English class: Is this a dangling modifier, or is that a case of using the possessive case before a gerund? Admittedly, the English faculty probably don't grade off if a student doesn't use the possessive case before a gerund, but if you flinched a bit yourself while reading that, then you can imagine how some students may flinch over the many uses of commas or over writing good topic sentences. Some catch on quickly, while others regurgitate from assignment to assignment.

Now how do you, the faculty member, grade all these regurgitating students? If they have lost faith in themselves and have not done all the work or slacked off on attendance, you cannot separate them from the real loafers, so you can justify an ***F*** grade for them. Or do you? Do you let your feelings maybe slightly pass some of these students along with those you ***know*** have been trying their best in order to encourage them because you think an ***F*** would be devastating to their egos? ***F***'s could also increase the college's attrition (particularly your department's) and thus hurt the budget even more. Or do you give them an incomplete (***I***), even though you will increase your work load the following semester by spending time with all these students on top of those registered in your classes? – even though the college will lose revenues because students don't pay for instruction for ***I*** grades? – even though students may be overwhelmed with the work in mastering the objectives in a competency-based program for ***I*** grades for one-to-three courses on ***top*** of doing their regular class work as a full-time student, especially if they are single parents or have employment? Or do you – to save your hide, your college's budget, or your students' minds – lower your standards or expectations? If not, do you suspect anyone at your college of lowering their expectations, maybe even unconsciously because of rationalization or repression or some other psychological defense mechanism?

To those using a competency-based approach, the semester's end is an artificial one but apparently must continue for the time being in order to collect tuition. However, according to ancient wisdom, we must not try pouring new wine into old leather bottles, else the bottles will burst and the sweet wine be lost. For the competency-based program, the semester system is an old bottle; the ***CS*** grade is a new, durable plastic lining in that bottle.

THE *CS* GRADE AND GENERAL EDUCATION COURSES

Secondly, let's say that your competency-based brethren and sisters have not convinced you yet of the efficacy of that approach but that you are very much interested in providing good thinkers for the work place. You recognize that people often have interests in other areas where they fear other students may walk off with all the ***A***'s and ***B***'s. If I were a student again, I would probably feel that way about quantum physics, for example. I am fascinated by the many concepts in that subject but haven't used calculus for over twenty-five years. If a ***CS*** grade were in place where such a course was being offered, I could take the class and do my very best, and, if I couldn't keep pace with the better-abled math students, I would need not fear getting an ***F*** and, if working on a degree, ultimately lowering my GPA. Yes, I could audit the course, but if I ***could*** do well, I might like the grade for the record.

Such reasoning brought the faculty across the curricula at Frostburg State University to adopt the ***CS*** for the general education courses in their departments. Agreed, quantum physics probably wouldn't be taught as a general education course. But in using an analogy to compare someone as far along as I with the typical college freshman, I believe you can get my point: quantum physics : Dermott, English professor: astronomy: college freshman who wants to major in English. Why not set up a system that ***encourages*** right-brained students to take courses requiring the use of the left brain and vice versa? Of course, if students should receive a ***CS*** in a general education course, they must either take the course over again or take another one to meet their general education requirements for graduation.

BENEFITS OF THE *CS* GRADE

Now in steps ***CS*** Grade, Superstar! Since courses retaken because of a ***CS*** are paid for, the college's budget hemorrhages slightly less. Administrators are thus happier. Because ***CS*** students become a part of your class load instead of an addition to it, you are happier. Because the courses become a part of the students' class load, they can carry a full load without the extra on top of it. Student stress is lowered, as well as attrition. And in a good college system, standards and expectations need not be lowered or compromised because no one is punished for some students' being slower than others in varying subjects, whether they are slower because of sick children at home, because of employment, because of learning disabilities, because of English not being their primary language, or because of whatever other reason you, the faculty, may judge as legitimate. In short, the estranged student can enjoy learning instead of fearing the almighty grade.

CONCLUSION

Whether or not ***all*** courses that don't use the competency-based approach will ever use the ***CS*** grade depends upon whether some important educational concerns can be resolved. Perhaps one of the most controversial is over whether or not students should meet their competencies within a certain time frame, namely the semester. On one side, educators argue that, since employers want workers who are not only competent but also efficient, students must be held accountable for meeting their competencies within a limited time. On the other side, educators say that students should not be limited by time constraints while learning to meet most of their competencies. Let the students learn at their own rate in regular courses and, if time is an important factor in a particular curriculum, then require the time element as a competency itself in a practicum or internship. Until these differences in educational philosophy are resolved, the ***CS*** grade will probably not be welcome in upper-level content courses, except for those being taught by the competency-based approach.

The ***CS*** grade is not a perfect panacea for all grading problems. Also, the ***I*** grade will continue to have its place in our grading system. But when a new educational idea is born and has proven its viability, shouldn't faculty investigate whether the concept is applicable to their current educational arena? ▼

CRITICAL THINKING:
Something To Think About

Denise S. St.Cyr

> A liberal education is the education which gives a man a clear, conscious view of his own opinions and judgments, a truth in developing them, and eloquence in expressing them, and a force in urging them. It teaches him to see things as they are, to go right to the point, to disentangle a skein of thought, to detect what is sophistical, and to discard what is irrelevant . . . .
>
> He is at home in any society, he has common ground with every class; he knows when to speak and when to be silent.
>
> — Saturday Review of Literature, November 21, 1953.

At the heart of educational reform is a vexing problem that has turned into an impending crisis. In this era of pervasive modern communications and academic excellence, it appears that students have a flawed understanding of critical thinking. This is a sobering commentary on their limited success in either expressive modality, written or oral.

In the past, academic wizardry elegantly camouflaged this dilemma. "There are two ways of spreading light: to be the candle or the mirror that reflects it." (Edith Wharton)

It naturally follows that a critical thinking curriculum is strongly needed and must foster ongoing development of related skills with the goal of ultimate mastery. Within these rubrics, instructional delivery systems must emerge as more relative to functioning in society and to employment.

In answering the clarion call for the development of these sorely needed critical thinking skills, students demonstrate a ravenous appetite for academic empowerment. Thus, this vision becomes for them and for their instructors, a mission.

A seminal activity which this writer's students are required to complete successfully includes an oral presentation which requires the fundamental skills of reading and demonstrating knowledge of one's subject matter. Albeit their maiden efforts are awkward, students exemplify the elegance of learning and teach their peers in the process. "Men learn while they teach." (Seneca)

The cardinal characteristics of this activity include but are not limited to:

- accessing one's own potential
- championing current events' issues
- evaluating semantics without substance, and
- monitoring pregnant pauses.

The speaker must demonstrate an ability to "recover" from nervousness and or distractions. The teacher may need to "cue"or question a student who appears to be struggling.

After the presentation (minimum length: fifteen minutes), five "audience students" question the speaker. According to Frank Kingdom: "Questions are the creative acts of intelligence."

The benefits of questioning are legion to critical thinking and to good communication. Because questions create a climate conducive to learning, students attend aggressively to this task. They are highly receptive and responsive. This gives testimony to Lawrence Davies philosophy: Intellectual energy grows stronger as it circulates. As a collective effort, it is convergently effective as it elicits firm and commensurate responses from the speaker.

This writer is convinced that the only stupid question that exists is the one that goes unasked. The presenter then, is expected to quiz three other students about his/her topic. This is a difficult yet liberating part of the exercise. Students learn to become sharply perceptive. They learn to discern, to think objectively. This engenders rational discussion and creative dialogue. There exists a coupling process and human interaction thrives.

The instructor then chooses one of the questions and later proposes it as part of future quiz/test/examination material. Students are no longer victims of academic surrender. They are no longer purveyors of right answers and standardized solutions.

Through such a multidimensional learning activity, they become critical thinkers. As they entertain challenging ideas, they gain a renewed perspective in terms of their virgin accountability for what and for how they learn. This becomes a matter of choice. Students elect to learn from each other; the instructor opts to facilitate and to serve as their coach, not as the prime mover of their instruction.

It is most difficult to evaluate this entire dynamic in terms of a quantifiable dimension; thus, the following form may serve as an objective assessment of the speaker's delivery.

PANEL (CLASS) EVALUATION SHEET

Please rate each category. 1 = low; 10 = high. Think critically.

1.	Introduction: Attention getting opening	1	2	3	4	5	6	7	8	9	10
2.	Body Narrowed topic Logical organization (pattern)	1	2	3	4	5	6	7	8	9	10
3.	Familiarity with material	1	2	3	4	5	6	7	8	9	10
4.	Presenter's identification of major points	1	2	3	4	5	6	7	8	9	10
5.	Presenter's application of concepts	1	2	3	4	5	6	7	8	9	10
6.	Presenter's questions to students	1	2	3	4	5	6	7	8	9	10
7.	Presenter's precision in answering student's questions	1	2	3	4	5	6	7	8	9	10
8.	Presenter's invitation to students to share their relevant knowledge	1	2	3	4	5	6	7	8	9	10
9.	Presenter's self-confidence	1	2	3	4	5	6	7	8	9	10
10.	Conclusion	1	2	3	4	5	6	7	8	9	10

TOTAL POINTS ____
100

Though most evaluations are viewed by students as toxic transactions, they are of utmost importance. A paramount criterion of the evaluation process is to have the speaker evaluate him/herself. According to Eugene Rice, long time critical thinking expert: "No evaluation is as worthwhile as a self-evaluation."

If students are to achieve nascent soberness about their critical thinking skills, "they must bring ideas in and entertain them royally, for one of them may be king." (Mark VanDoren) They must demand of themselves more questions than answers. These very questions will serve as patent stimuli to achieve. Piaget once said that "knowledge is a system of living and acting operations." One must also include a third component--thinking. It is this fundamentally sound element that complements instructional methodology and ultimately galvanizes all students into action.

Neither a dramatic crescendo nor a penultimate tool, knowledge about critical thinking speaks volumes to the fact that learning and living must achieve coherence and meaning. Students become infinitely capacitated for the future. They learn to think and they think to learn.

POST SCRIPT

If students are tired at the end of a course, they are h-u-m-a-n!

If they have learned something new by the end of a course, somebody (hopefully) will benefit.

If they have not learned anything new by the end of a course, they will think about that

and

They will see things from a different perspective . . .
They will have learned

CRITICAL THINKING:
SOMETHING TO THINK ABOUT

The following selected sources may be helpful to the reader:

Baron, Joan and Robert Sternberg. Teaching Thinking Skills: Theory and Practice. New York, NY: Freeman Co., 1987.

Barry, Vincent E. and Joel Rudinow. Invitation to Critical Thinking. 2nd Edition. Englewood Cliffs, New Jersey: Prentice-Hall, 1986.

Broomfield, Stephen D. Developing Critical Thinkers. San Francisco, CA: Jossey-Bass, 1987.

Brown, Neil and Stuart Keely. Asking the Right Questions: A Guide to Critical Thinking. 2nd Edition. Englewood Cliffs, New Jersey: Prentice-Hall, 1986.

Costa, Arthur L. Developing Minds: A Resource Book for Teaching Thinking. Revised Edition, Volume 1. Alexandria, VA: ASCD, 1991.

Goffman, Erving. Presentation of Self in Everyday Life. New York, NY: Doubleday and Col, 1954.

Meyers, Chet. Teaching Students to Think Critically: A Guide for Faculty in all Disciplines. San Francisco, CA: Jossey-Bass, 1986.

Michalos, Alex C. Improving Your Reasoning. Englewood Cliffs, New Jersey: Prentice-Hall, 1986.

Norris, Stephen P and Robert H. Ennis. Evaluating Critical Thinking. Pacific Grove, CA: Midwest Publications, 1989.

Ruggiero, Vincent. Thinking Across the Curriculum. New York, NY: Harper E. Row, 1988.

Scriven, Michael. Evaluation Thesaurus. Point Reyes, CA: Edge Press, 1991.

ERIC DOCUMENTS

ERIC NUMBER	
ED 351954	Blai, Boris Jr. Assessment of Critical Thinking in Postsecondary Educaiton
ED 311752	Blai, Boris. Critical Thinking: The Flagship of Thinking Skills? [89]
ED 298442	Browne, M. Neil; Keeley, Stuart M. Do College Students Know How To "Think Critically" When They Graduate? Source: Research Serving Teaching; vi na Spr. 1988
ED 298805	Cerbin, Bill. The Nature and Development of Informal Reasoning Skills in College Students. Apr. 1988
ED 270732	Davis, Kathleen A. Teaching Critical Thinking on The College Campus: An Across The Curriculum Approach. [86]
ED 368311	Facione, Peter A.; And others. Are College Students Disposed to Think? Apr. 1994
EJ 344199	Facione, Peter A. Testing College-Level Critical Thinking. [86]
ED 337498	Facione, Peter A. Using The California Critical Thinking Skills Test in Research, Evaluation, and Assessment. 1991.
ED 351643	Garcia, Teresa, Pintrich, Paul R. Critical Thinking and Its Realtionship to Motivation, Learning Strategies, and Classroom Experience. Aug. 1992
EJ 476384	Halpern, Diane F. Assessing the Effectiveness of Critical Thinking Instruction. Source: Journal of General Education; v42 n4 p. 239-254 1993.
ED 366955	Haynes, Jared. Designing Writing Assignments That Foster Critical Thinking: A Belief Annotated Bibliography. [93]
ED 358772	Jones, Elizabeth A.; Ratcliff, Gary. Critical Thinking Skills for College Students. May 1993.
ED 367400	Kiah, Carmon J. A Model for Assessing Critical Thinking Skills. Nov 1993.
EJ 404028	King, Patricia M.; And Others Critical Thinking Among College and Graduate. Review of Higher Education; v13 n2 p. 167-186 Win 1990.
EJ 385709	Kurfiss, Joanne Gainen. Helping Faculty Foster Students' Critical Thinking in The Disciplines. Source: New Directions for Teaching and Learning; (The Department Chairperson's Role in Enhancing College Teaching) n37 p. 41-50 Spr. 1989

EJ 385709	Kurfiss, Joanne Gainen. Critical Thinking: Theory, Research, Practice, and Possibilities. ASHE-ERIC Higher Education Report No. 2, 1988.
ED 318368	Lincoln, Yvonna S. Advancing a Critical Agenda in Higher Education. Nov. 1989.
EJ 354319	McMillan, James H. Enhancing College Students Critical Thinking: A Review of Studies. Source: Research in Higher Education; v26 n1 p. 3-29 1987.
ED 280362	Meyers, Chet. Teaching Students to Think Critically. A Guide for Faculty in All Disciplines. Jossey-Bass Higher Education Series. First Edition. 1986.
EJ 454853	Miles, Curtis. The Fourth "R": Checklists for Assessing Thought in Action. Journal of Developmental Education; v16 n2 p. 32-33 Win 1992.
EJ 422559	Mines, Robert A.; And Others. Stages of Intellectual Development and Associated Critical Thinking Skills in College Students. Source: Journal of College Student Development; v31 n6 p.538-547 Nov. 1990.
ED 340762	Paul, Richard W.; Nosich, Gerald M. A Proposal for The National Assessment of Higher-Order Thinking at the Community College, College, and University Levels. Nov 1991.
ED 253264	Phipps, Rita. Critical Thinking and Community College Students. Mar. 1984.
EJ 437159	Saarmann, Lembi; And Others. The Relationship of Education to Critical Thinking Ability and Values Among Nurses: Socialization into Professional Nursing. Source: Journal of Professional Nursing; v8 n1 p.26-34 Jan.-Feb. 1992.
EJ 276628	Sadler, D. Royce. Evaluation and The Improvement of Academic Learning. Source: Journal of Higher Education; v54 n1 p.60-79 Jan.-Feb. 1983.
ED 364882	Storla, Steven R. Writing for Critical Thinking: Problem Solving and Information Transfer. Apr. 1993.

GUIDED INDEPENDENCE

Barbara Dimmick

I come to teaching as a writer. In my early twenties, I worked as a freelance writer; in my mid-twenties I went to graduate school and spent two years immersed in writing fiction and in talking with other writers. Writing continues to be the central endeavor of my life; my teaching is influenced by my work, my observations, and my conversations with working writers.

I entered full-time teaching as something of a pragmatic zealot. I had seen many habits and strategies work for me and for many other writers, and I believed in the value of hard work. During my first years of teaching writing, I required not only weekly drafts or revisions, but four ancillary assignments: a personal journal for half the term, a reading journal for the second half of the term, and a spelling log and editing log in which students recorded and worked with concepts which seemed to be giving them difficulty.

It has to be said that, on some level, those strategies worked: the students who actually survived my courses were far better writers than they had been when they began. They did, however, complain about the work load, pointing out that ***they*** did not want to be writers and that they spent far more time on their homework for their writing course than for any other course.

I admit that, since writing is so central to my life, it still baffles me that someone could actively want ***not*** to write or at least to write better. I will also admit that I believe that good writing is essential to good thinking, to academic and professional success--to say nothing of the continuation of something as fragile as a democracy.

Over the last few years, however, my thinking about these assignments, and my approach to ancillary work in a writing course, have changed. I still believe that good writing matters. I still believe that journal writing, attentive reading, and work with editing all strengthen a student's writing. After all, I don't ask my students to do anything that, as a working writer, I don't do myself. The difference is that, as a writer, I have chosen to undertake these things because I know their value.

What I try to do with the assignment of the eight-hour project is help my students see their own needs and then give them the opportunity to choose what will help them improve their writing. What follows is a model that can be modified for a variety of academic fields. The examples here are taken from my Prose I course experience at Claremont.

THE ASSIGNMENT

The actual assignment is forthright. Each student in my Prose I class must take a test in the PLATO lab, for assessment purposes, then meet with me individually in order to draw up a plan for eight hours of work, to be spread over eight weeks, that in some way will strengthen her or his writing. It is then the student's responsibility to follow through on the outline we have established. At the end of the eight hours of work, each student again sees me individually in order to examine whatever materials have been produced, to evaluate accomplishments, and to discuss plans for future work.

THE ASSESSMENT

The first stage of guided independent work, I believe, must be a clear, practical look at where the student stands at the beginning of the course. A simple approach to this stage of the project is to come up with a list of skills that a student should or must have in order to succeed in the course. These are skills that will not be taught within the course itself, but that the student should already have.

In Prose I, I rely on three separate sources of information.

The first is a test of grammar and spelling skills that my students take in the PLATO lab. With the help of PLATO lab staff, the test was easy to compile from a list of available units in the PLATO program. I try to make as clear as possible to my students that this is an evaluation or an inventory and that it will show us what they already know and what they might need to work on. What we are looking for is information about their language skills.

The second source of good information is the student's first paper. I wait to begin projects until I have at least one essay the student has written as an out-of-class assignment. Often the strengths and weaknesses identified by the PLATO test are mirrored in the student's writing. Sometimes, however, there are glaring differences: A student who, on the PLATO test, cannot tell the difference between an independent and dependent clause might, indeed, write beautiful sentences. Another student might do brilliantly on the PLATO test, having had years of drill, but might not be able to tell the difference between a comma and a period; when writing this student therefore strings together sentence after sentence with commas, or puts a period after every phrase and partial clause. Whenever possible, assessment of skills needed for the course should probably include some application of those skills in a complex task, or at least in a task which mimics what the student will be required to undertake within the course.

The third source of information is the student. Although I can scan the PLATO assessment and read those first drafts with a careful eye, the student is a wealth of information about her or his fears, abilities, and needs.

THE CONFERENCE

Before I schedule conferences with students, I give them a handout on frequently-chosen project activities. These include spelling, grammar, vocabulary, reading comprehension, a reading journal, and a personal journal. I also point out that they are welcome to come up with other ideas for their projects. I ask them to read the handout carefully so that they can come to conference prepared to discuss their options. I try to underscore that they will have a large say in choosing how to spend these eight hours.

Initial project conferences are held in our learning center. I choose this location partly because I don't have an office where I can meet with students and partly because it forces students to find and enter the learning center. Students who shun the learning center because of what they perceive as its stigma discover that it is a place for all students, faculty, and staff, and that a wide variety of computers and other tools and resources are available for use. Students who will later be carrying out their projects with the help of the learning center faculty and staff can immediately schedule appointments and can often meet the individual with whom they will be working for the next eight weeks.

I believe short, direct, focused conferences are in everyone's best interest, and I specifically limit these conferences to fifteen minutes, stressing the need for prompt arrival, staying on task, and wrapping up in an orderly way.

I begin the conference by looking at the simple evidence: the PLATO results. Students often see the PLATO evaluation in terms of "passing" and "failing," but I try to show them a different way to look at these results. First, I walk the student through the list of everything she or he did well. Volumes have been written on the need to build a foundation of positives and strengths, and I take time to praise, to compliment, and to let the student absorb the praise and to respond. Second, I show the student how to read the PLATO results in terms of patterns. Students want to count up the number they "got wrong," but it is more valid, and more useful, to look for patterns of problems. For instance, if a student has not mastered the section on sentence fragments, we look at the other sections which have to do with sentence structure. If several tests in this group have been missed, we label that as ***one*** area of concern.

Throughout this process, I ask the student for her or his opinion. I've seen students blanch to see that they passed all three of the spelling tests. If I ask about their spelling, many will say they are terrible spellers, that they had planned to choose spelling as a project, and that the test was easy because it is based on recognition--not on spelling the word without any help.

These commentaries on the simple assessment tool lead quite naturally to a look at the student's first draft--the more complex sample of the student's work. We take a look at what's been done well on the simple assessment and see if it's been done well in a more complex setting. We look for discrepancies: Is the spelling still good in this draft? How's the punctuation? The sentence structure? The differences between the two are often remarkable; in these situations, the more complex sample is what matters.

One of the most useful strategies of the conferences is to simply ask what concerns the student has about college level writing. These often include predictable matters, like grammar and spelling, but often include worries about reading comprehension, fear of the classroom setting, writer's block, or lack of time. Generally, I can identify which of the student's perceived needs will be addressed in class--for instance, paragraphing or essay structure--and which might be good ideas for projects. At times, since many students who take Prose I are also new to the college, I refer them to one of our various counselors to further discuss personal matters which certainly will affect their academic performance but which are far out of the range of the course itself.

Several interesting things happen during these conferences. One of course is simply getting to know one another a little better. Another is that students seem to absorb the message that language skills are not finite, that everyone can profit from more focused attention on some aspect of their reading or their writing. Learning, they seem willing to accept, is ongoing. The project is not a punishment for doing poorly on the assessment; everyone in the course must undertake it.

The most exciting aspect of conferences is that the student and I are examining evidence of both their skills and needs. In light of the philosophy that everyone has something to learn, students often seize this opportunity to openly discuss their worries and identify their weaknesses. This willingness is a dramatic shift from the days when, in conference, I would point out that I had some concern about sentence structure, and the student would come up with any one of a number of what I once thought were excuses but which I would now call defenses: they were out of practice and would soon "remember;" all those errors were typographical; they had been in a hurry and would take more time on the next paper; and so on. But now, in looking at PLATO results and at first drafts, we're examining evidence, not discussing my judgment. We're also not discussing why the problems appear in the writing; we're discussing what to do about them.

From the outside, I suspect that the actual choice of projects can seem haphazard and unscientific. Based on our discussion, I always ask the student what he or she would like to undertake--or what he or she believes ***should*** be undertaken.

The answers vary, sometimes wildly, but often there is an underlying logic or wisdom that only the student can supply. What's more, the project is more likely to be successful if the student is making an informed choice.

To be sure, there are many obvious choices that students make. After viewing a PLATO assessment and a first draft riddled with sentence problems, many students choose to focus on sentence structure. Students who struggle with spelling, especially those going into allied health programs, choose to work on their spelling. Students who have good grammar skills but who find writing difficult choose to write journals.

But then there are the surprises.

Some students, whose lack of spelling and grammar skills are blatant, will opt to follow another path: reading comprehension or journal keeping. If they can tell me why they believe the choice is good, I go along. In these cases, however, I warn the student clearly that he or she will be held accountable for these skills in the course and that I do not teach any basic spelling or grammar. Once I feel the student understands the potential consequences of the choice, he or she is free to make it.

Other students do the opposite. Their assessment shows full mastery of spelling, sentence structure, or punctuation. They seem to have fine vocabularies. But what they say, often with a tinge of anxiety in their voice, is that they really don't "understand" why they do what they do: they don't know the rules for spelling, or why they put commas where they do. I have learned to agree with these projects that seem unnecessary. One student, who wrote very well and who had a good intuitive sense of editing, stopped me after class more than once to tell me what comma rule she was working on. "I feel so much better," she would say. "***So*** much better, because now I ***really*** know what I'm doing". She was right to have chosen the project that she did.

Another student wanted to work on her vocabulary. I thought her vocabulary was fine. She did not. Three weeks into her project, she came to me rather sheepishly and asked if she could change her project. "It turns out my vocabulary is pretty good," she said. I believe there was no other way she could have learned that about her writing. It was three hours of independent work well spent.

Other surprises have been projects I never would have thought of to assign. One young woman, who was terrified of coming to class, never mind raising her hand and speaking, set out to overcome her fears. She undertook a traditional journal-writing project, but in addition worked with a college counselor on a program that increased her confidence and her ability to speak. I still remember the first day she raised her hand in class, and, a few weeks later, the first time she broke into a discussion. By the end of the course, her classroom demeanor had changed entirely.

There are many of these stories as students seize this opportunity. One student undertook a study of writer's block. Another wrote an extra paper a week, writing a family history for her children. Highly-skilled students undertake new challenges: character sketches for a short story, exercises in creative writing books, drafts of poems. Others have chosen to focus their journals on some aspect of their lives or their studies, combining their writing skills with examination of some specific event or undertaking.

In fact, once the student has chosen the project, my contribution is often the insistence on some kind of integration of the project work into the course overall. Students who work on spelling comb their drafts working on their own lists of difficult words. Students who undertake any kind of grammar work must keep a notebook in which they record the concept or rule they have been studying. They must also find and correct three sentences in their papers according to this new rule. Students who keep reading journals are asked to examine in their notes whatever concept we are discussing in class that week: title, conclusions, detail, sequence. Students do not need "workbook" skills; they need skills they can and will use when they read and write. Projects are ancillary to the course, and it is important for students to see and explore the connection between their projects and their other work.

After the student and I have agreed on a project for the eight hours, I write a plan which records what has been decided. The first section identifies the overall goal. The second section identifies the action to be taken. The third section describes how the project will be brought to closure and evaluation. The student and I each keep a copy of the plan. And, when the learning center is involved, a copy is sent to them.

THE EIGHT WEEKS

Projects fall into two categories: those in which the student is entirely independent and those in which the student works in the PLATO lab or the learning center. The projects in which students are sent to the PLATO lab or the learning center require some time and effort on the part of faculty and staff. Based on their own preferences and my suggestions, students themselves make the choice between working in the PLATO lab or with a tutor. The PLATO lab is pretty straightforward: after the student has a referral, he or she works in the lab on sections not mastered on the assessment test. Work with tutors through the learning center has proven more difficult to coordinate, but when they work, these learning center projects have proved invaluable. Clear project plans are an absolute necessity, so that a student who needs to work on sentence structure does not get derailed into identifying simple parts of speech. Students must also take responsibility, speaking up on their own behalf when, for instance, materials in a reading comprehension project are too difficult or too easy. A certain amount of give and take is required until student and tutor are working at the most profitable level. Communication is vital to make these projects a success, but our learning center staff appreciates the chance to do some independent course work with students and the students who need it receive far more time from learning center staff than I can possibly provide.

Whether their projects are entirely independent or involve the learning center, students are told that the project is their responsibility. If they run into problems or have questions, they are to ask for help as soon as possible. I often step in to assist with some difficulty or to sort out a misunderstanding or a block, but I will only do so if the student has asked for help. Otherwise, during the eight weeks, I remain relatively silent about the project. Once in a great while I might ask in class if anyone is stuck, and toward the end of the project period I begin to suggest they make appointments for their final conference. Beyond that, however, I neither nag or remind. The ability to carry out tasks over a period of time without being nagged is one skill necessary for academic and professional success; for some students, working for eight weeks in relative independence is one of the most difficult aspects of the project.

CLOSURE AND EVALUATION

At the end of the eight weeks, I again see my students in fifteen minute conferences. They bring the materials they produced during their project. I flip through personal journals, read entries in reading logs, scan the rules and editing they have worked on in grammar projects. An important part of this conference is having the student talk about her or his work; I ask a wide variety of questions, the answers to which give me a good sense of the student's progress and how well the student has understood the work she or he has done.

During this conference, I also assign a grade. Often the student can assign the grade quite accurately, since the bottom of the project plan includes a list ranging from an A, which means the student followed through on the plan and did the work very well to a C which means that the student completed most of the project plan. I do not require that a student be able to pass a spelling test or a grammar test or write a formal report on their reading. For this small part of the course, making the commitment and then making progress are all that matter. The project grade is roughly ten percent of the overall grade: a terrific project can tilt a borderline grade upward; a poor project can lower a grade.

Not all projects are brilliant or successful. Sometimes students neglect the work because they see it as unimportant. Other students have plenty of "reasons" they couldn't keep learning center appointments or they insist that their children tore up their journals. Some students try to rush through projects at the last minute. (One helpful aspect of the PLATO lab is the readout on dates and times spent working on the program). Some flounder and do not ask for help. Some simply go through the motions. None of these problems, of course, are new to anyone who teaches; students who have as yet to take responsibility for their learning will treat a project the same way they treat other work. As with other work, there are consequences in the final grade for neglecting the project.

Successful projects outnumber the failures. Students learn to consult sources outside the classroom. They acquire some level of independence. Students with poor skills work on what they lack without embarrassment. Advanced students take on challenges that prompt them to write in ways they otherwise might not have tried. Occasionally, during a class discussion on editing, a student will volunteer an answer to a question: "I know that!" more than one student has said. "That's in my project!" Sometimes they turn to one another for help: "Is anyone doing spelling? What *is* that rule about 'i' and 'e'?" During final conferences, I talk with students about their plans for future work: more work in the PLATO lab, more tutoring, more journal writing. It's often surprising how often students continue the activities they began in their projects. I get a Christmas card every year from a graduate who, before her project, had never read an entire book; each year she sends a list of all the recent titles she's enjoyed. One day at the grocery store, I heard someone call my name. It was a former student, waiting at another register. She cupped her hands to her mouth and called: "I'm still keeping that journal. Thanks! It's really great!"

The independent project parallels in a small way some of what leads to success in any long term endeavor: a plan, patience, responsibility, integration of new learning into complex tasks and into life in general. As a writer, I know I will never finish learning, never finish reading, never finish absorbing new concepts and ideas. There is a joy in the ongoing nature of learning. But there is also power, once one has realized one ***can*** learn beyond the bounds of the formal course work. One student said it best: "I didn't just learn to spell. I learned I ***can*** learn to spell." He paused and smiled. "And that's amazing."

ORGANIZING THINKING:
Teaching Students to Learn Independently

William V. Wheeler

This is a brief description of a model I have been using for the last several years to structure student inquiry and discussion. Its purpose is to assist students in developing intellectual habits required for independent inquiry. The model is applicable to all disciplines and consequently can be used to implement critical thinking competencies across the curriculum. It is useful as an organizing principle for curriculum development, lesson planning, and learning activities.

The basis for this model is found in ***How to Read a Book*** by Mortimer J. Adler and Charles Van Doren. In this book Adler and van Doren describe the process of reading a book as consisting of three different and successive readings. The first reading is analytical and focuses on simple parts, the second is synthetic and is concerned with the complex wholes created out of the parts. The third reading is critical, focusing on the sufficiency and adequacy of the parts and wholes to solve the problems or achieve the effects claimed by the author or artist.

I use these distinctions as the basis for three different types of questions that I ask in various forms. Questions of **fact**, seek to identify terms of the discussion (e.g. expository writing) or elements of the work of art or important aspects of a situation (e.g.case study). Questions of **interpretation** inquire about the resulting propositions and arguments, artistic effects or solutions to the situational problems. **Evaluation** (criticism) seeks to determine how successfully terms, propositions and arguments, artistic materials or solutions to problems have been constructed and applied. In a class studying Galileo's inquiry into motion, fact questions would refer to fundamental terms such as distance, time, size, color, speed and weight. Questions about interpretation might focus on both why only some of these elements were seen by Galileo to be significant and how he mathematically related them to one another. One form of evaluation would consist in running simple experiments with stopwatch, inclined plane and ball, and using the results to judge the adequacy of Galileo's formulas.

In viewing a painting, facts correspond to the perceived painterly elements like color, line, proportion, etc. Interpretation uncovers how the elements work together as a whole (analogous to an expository argument) to achieve an effect. Evaluation seeks to judge the extent and reasons why the painting does or does not as a whole successfully "work" to achieve this effect and might involve sustained observation, reflection and discussion.

This schema can be followed in every discipline: history, science, mathematics, music, social science, languages, and applies to practical as well as theoretical treatments of subject matters.

What follows are typical questions and responses for each category of questions. I have, in the interest of clarity and brevity, greatly simplified the questions and answers. It will, however, give the reader an idea of the content and direction of the discussions.

Questions of fact are based on observation, interaction, or experimentation and ask: "What do you notice about what is before you"

Examples:

For students replicating Galileo's experiments:

Q: "How many things can you tell me about how the ball behaves on the inclined plane?"

A: "It picks up speed as it rolls down."

A: "It rolls only up, not down."

A: "Without the plane under it, the ball would drop straight down."

A: "The steeper the incline the faster it rolls."

For students reading a novel:

Q: "What can you tell me about the narrator of the story?"

A: "The narrator's name is Charles."

A: "Charles is a very selfish person".

A: "Towards the end of the story Charles seems to do some remarkable acts of kindness."

For students analyzing a case study:

Q: "Given that we all learn, everyday of our lives, from what we observe around us, what can we say about Edith's opportunities for learning?"

A: "All of Edith's role models are persons whose behavior is deviant."

A: "Very few of her appropriate, 'normal' behaviors are noticed by the staff; they seem only to respond to her inappropriate behaviors."

A: "Edith's only reward for acting 'normally' is to be forced to quickly leave. The institution is not the happiest of places but it is one of the only places Edith knows well."

Questions of fact challenge the learner to **notice**, to interact with the object of inquiry for a sustained period of time. Questions of fact are frequently glossed over by students and instructors on their hurried way to the supposedly more important issues of theory (interpretation). Yet observation is the foundation of all productive inquiry, Observation is what gives birth to new theories either as a result of new, more precise observation or critical reexaminations of previous observations. Observation is where inquiry begins and where it returns. Further, we must always keep in mind that observation is a skill. Students usually need to learn how to observe and to clearly and distinctly describe their observations.

Questions of interpretation are about what all the parts (facts) add up to or **mean**. The interpretation **explains** the facts and tells how they are related to each other or to some other thing. Asking and answering questions of interpretation requires more significant inferential reasoning than questions about facts. Interpreting facts usually requires theoretical (and frequently non-observable) concepts. Several competing concepts can be put forward to explain the same set of facts. We are able to explain the behavior of physical bodies by using mathematical relationships, or by using theoretical, inferred concepts like "inertia", and "force". Ambitious instructors and students discuss motion using concepts like "impetus" or "nature". Such an approach can help the student to appreciate the history of changing concepts as the consequence of larger changes in metaphysical and epistemological frameworks each of which "discredits" formerly "respectable" ideas. Yet within their respective philosophical frameworks, these interpretive concepts remain powerful explanatory devices.

Likewise, why we react in predictable ways to different kinds or genres of stories can be theoretically explained by referring to the "powers" of kinds of plot structures (genres) or to mythic archetypes rooted in our collective unconscious or to transcendent truths beyond language that are grasped only symbolically by art.

In social science and psychology the behavior of individuals and groups can be explained by using such diverse theoretic concepts such as "social role", "stimulus-response bond", "functional disorder", "class conflict", "anomie" or "dialectical materialism". Choices in such interpretive concepts involves choices (frequently made unknowingly) between different philosophical assumptions.

Examples of interpretive questions and answers:

Synthesizing terms into a mathematical relationship:

Q: "What appears to be the relationship between velocity, time and distance?"

A: "The velocity of the ball increases with the distance the ball rolls down the plane."

A: "The velocity increases with the length of time the ball rolls down the plane."

A: "The velocity increases with both the length of time and the distance the ball rolls downward."

Building on the prior observations in order to understand "character development":

Q: "What accounts for the different impressions readers seem to have about Charles?"

A: "He changes."

A: "His experiences in France make him appreciate friendship and loyalty."

A: "The goodness in Charles seemed smothered in the beginning by all the abuse he suffered."

Seeking to understand what the "facts" of the case mean:

Q: "How does Bandura's concept of 'social learning' help us to relate what at first seem to be unrelated aspects of Edith's experiences?"

A: "It seems to help us understand the significance of the fact that Edith has few opportunities to observe behaviors that are regarded as 'normal' by the community."

A: "It ties together many aspects of her experience: lack of opportunities to observe, try out, and receive feedback and rewards for non-deviant behavior."

A: "It enables us to understand the constituent factors of 'institutionalization'".

There are always several different answers to the same question of interpretation. Competing explanation of the "same" facts are usually distinguished by how completely each accounts for and explains the facts. It is important to require students to ***support interpretive answers by referencing facts***. Discussions of interpretation frequently stimulate closer reexamination of the facts and sharpen students' powers of observations. Referencing facts to support interpretations enables students to acquire the intellectually important habit of comparing conclusions with all of the evidence, not just evidence that is supporting.

Questions of evaluation are used to consider whether a particular interpretation sufficiently explains the facts, or which among several competing interpretations explains the most facts. It tests the interpretation by referring back to the facts and by testing the practical and theoretical consequences of the interpretation.

Examples (continued):

Q: "What do the results of your experiments suggest?"

A: "That we never observe according to the formula; there's always variation."

A: "The discrepancies between the predicted and actual results seems to prove Galileo's assumptions that the mathematical relationships can only be observed in empty space."

A: "That without error analysis, we would constantly be confronted with results that disconfirmed the formulas."

A: "That the fact that Galileo had to think through relationships that no one can possibly observe proves that he was a genius."

Q: "How probable is Charles' character change?"

A: "It all takes place too quickly."

A: "Yes, but trauma can produce sudden change."

A: "The change is sudden, but the sequence of events
especially his childhood abuse, the experience of combat, the long period of helplessness during recovery and the friendship he forms with Emma, all make his change quite possible."

A: "Given the sequence of events, no change or gradual change in Charles character would seem improbable."

Q: "How well does "social learning" explain Edith's actions?"

A: "It seems that everything Edith does before and during hospitalization can be explained in terms of social learning."

A: "Yes, but what about persons all around Edith who had similar experiences but responded so very differently?

A: I don't know. "Social learning" explains a lot, but understanding Edith adequately still seems to require consideration of her internal thought and emotional processes."

This sequence of questions, from fact to interpretation to evaluation is a powerful method of critical thinking. It teaches students to learn by observing closely and discovering the structure of the subject. Too frequently students act hastily and experience a thing through previous experiences and assumptions. When this happens, learning has not taken place. The student has misunderstood the subject and mistaken it for something else. This kind of learning is fostered by textbooks which seem to have the purpose of presenting interpretive concepts and theories as conclusive. Textbook dominated learning produces doctrinaire rather than critical thinkers.

The "scientific" or "experimental" method of observation, hypothesis and verification is simply a special application of this model. This means that the model can be used to apply scientific method core competencies across the curriculum, not just to subject matters that are traditionally considered "scientific". The careful reader of literature or observer of art is no less "scientific" than the student in the physics lab. They both seek to ascertain the elementary facts, understand how these combine into intelligible structures and finally, both seek to test their understandings by some technique appropriate to the matter at hand. ▼

Section III

BINDING INTO COMMUNITY

YOU WANT ME TO DO WHAT BY WHEN??

or

Faculty Orientation/Mentoring Program

Terrie Judge

New faculty, whether full-time or adjunct, need orientation to a new College. If new faculty do not have an academic background, from either education or experience, then additional support is necessary, ie. mentoring. At the same time, professionals need to maintain autonomy and academic freedom. The following program was developed with flexibility and structure, to be tailored to individual and institutional requirements. The cost is minuscule when compared to the cost of lost or decreased productivity from a floundering faculty.

The purpose of orientation is to acquaint new faculty with resources so they can accomplish their goals in an efficient, effective manner. The outcomes will be a faculty member who feels comfortable in his/her job. Faculty new to the academic setting require longer support, in this case, mentoring,. Additional outcomes include an easier transition from industry to academia, a decrease in stress levels, and a more productive faculty earlier in the school year. Teachers who rapidly acclimate to a new setting are able to focus on student learning sooner than teachers who are trying to find or develop the mechanics needed to teach. The overall goal is to retain experienced faculty for the benefit of the students.

Orientation should begin with linking the new faculty to a more experienced colleague. Ideally, initial contact should be made prior to the first required day, so new faculty know where to park, where their office is, etc. A tour of the facility could be done individually or in a group.

Introductions should occur informally or formally at the initial faculty or general meeting. All faculty should receive a faculty handbook, college catalog, and student hand book, as well as publications specific to their department or program. A helpful booklet entitled "Often asked questions" was developed by Dr. Doyle Davis at Berlin in 1990 following a survey of faculty. Updated annually, the booklet fills in gaps and allows faculty to internalize information at their convenience.

The following can be addressed individually or in a group with a faculty leader, but needs to occur the first or second day:

Who's Who and What's What
  Chain of command (if any)
  Roles of committees (How to get on and Off)
  Budgets (Class 20 and other usable parts)
  Obtaining supplies and equipment (with minimum hassle)
  Maintenance and cafeteria requests
How to:
  Use telephone, copier, etc.
  Mail (Incoming and outgoing) & messages
  Clerical support (if and when available)
  Resources, including computer labs, library, etc.

Expectations of new faculty and Department Chair (or whomever) should be discussed after 2 weeks to a month, with documentation becoming part of an orientation file. Review of an evaluation tool is helpful in determining what works and what does not, leading to revisions in process for the future. It is more effective and less intimidating to share the evaluation process early, rather than waiting until the end of the year. For experienced faculty, the orientation is often enough to give them a positive start and they, in turn, develop their own support as needed.

For non-academic faculty, orientation is just the beginning. The support needs to continue throughout the year, via ongoing mentoring. While meetings or group sessions offer one method, mentoring offers a more cost-effective and politically-correct alternative. Mentors need to be voluntary and selection should be based on superior communication and interpersonal skills as well as experience. Mentors ideally should be from the same curriculum, although "outsiders" often add a refreshing viewpoint. The primary criteria is the desire to assist a colleague. While funding would probably not be available, watching a new faculty member develop and grow in his/her curriculum can energize all but the cynical "no-pay, no-work" crew. Appointment to mentoring without the desire causes more harm than good.

The next step is matching mentor to mentoree. This needs to be flexible to allow for unseen circumstances, but usually results in a strong "team". Frequent checks of progress by a third party may facilitate the matching process, especially when there is a problem.

As with orientation, the process of mentoring works smoother when initial contact is made prior to arrival at school. If the new faculty is new to the area, the mentor can often provide valuable tips and contacts about housing, health care, and "how to get therah from herah". Once school begins, activities may include attending faculty meetings together, going to each other's classes for observation and feedback, and informal contacts for questions. Assisting with the development of a "Growth Plan" would serve to focus the process. Other activities, as the year progresses, may include attending faculty, college-wide, or curricular meetings and continuing education programs, participating on committees of interest, and the evaluation process. Test development and validation skills are usually weak in faculty members without educational theory in their background. Mentoring can assist with this deficit as well as curricular development and teaching strategies as the need arises. Student advising, assessment, and evaluation are also areas where mentoring may facilitate faculty adjustment to academia. Linkages with full-time faculty help to keep the adjunct faculty involved in the educational process and often results in a more consistent program and eventually a full-time faculty member.

As stronger ties are established between technical colleges with universities and industry, an increasing number of new faculty will need orientation and mentoring to produce cost-effective, highly motivated and motivating educators who know how to "do what, by when?" ▼

Source: Carson, V.M., & Deming, M.P. (1990). Mentoring part-time faculty. ***Community, Technical, and Junior College*** (60,5), 39-41

CONNECTING LIFE WITH CLASSROOM LEARNING

Sandra Cole

Frequently very able adult students tell us that they didn't care much about education when they were in high school. Some of their disdain seems to come from the fact that they didn't "buy into" the idea that what they were taught would be of any value to them in the real world. Algebra, literature, physics-they couldn't see how that would be of importance to them in doing what they needed to survive in the world outside their high school walls. Many dropped out, intellectually if not physically.

Students who seek out a technical college education may do so because they value its practicality, its ability to offer them something that will be of concrete value in the real world. Program instructors know that they are sharing applicable, money-generating skills with their students. If a student truly enjoys learning and using those skills, he has little problem in motivating himself to study in his technical courses.

Put such a student in a general education class, however, and the student may at least at first revert back to high school mode. Viewing the class content as being of little practical value, the student may feel like it's force-feeding time again. He may study for a grade, but not because he intrinsically values the concepts we are trying to teach. It is possible, however, to encourage the student to disprove his own hypothesis that classroom knowledge in your subject has little application to real world life.

I have devised an assignment that attempts to foster an understanding that the content of my psychology course is valuable in everyday life. It also promotes a life-long-learning focus which may continue after graduation. Studies have proven that material which is connected to previous learning is more fully retained than facts learned in isolation. I attempt to encourage the fact-finding and connecting process by assigning a Life-Long Learner Collection as a final class project. While this works very well for me in psychology, it could certainly be adapted to other course concepts from science, math, social sciences, and technical courses as well.

At the beginning of the course, I ask all students to read thoroughly the Table of Contents in their text, thereby acquainting themselves with the wide variety of topics to be covered during the semester. I liken it to labeling a file folder for each topic. As the course goes on, they are to search their own real-life world for information to put in each file folder. Material can come from books, magazines, television programs, commercials and ads, conversations, news stories- virtually anywhere that information is disseminated.

Their instruction sheet for the assignment states:

> *In order to encourage you to become a collector and coordinator of information, you are being asked to become a detective for psychology-related material you may encounter during the semester. Each time you recognize a term or concept we have studied, whether in a conversation, commercial, TV show, book, other course, real life experience, etc., jot it down (or cut it out) and include it in a folder to be turned in at the end of the course. You need not go into intense discussion (unless you're trying for extra credit), but a few words to tell how this applies would be most helpful in guiding me through understanding your thoughts on including it.*
>
> *The point that you're trying to get across to me is that you are actively assimilating what you learn in the world around you. It is VERY MUCH RECOMMENDED that you do this as you go through the course, not wait until the last minute and search through magazines and newspapers to find "stuff that applies." That defeats the purpose to a great degree because I want to see evidence of CONTINUOUS LEARNING as opposed to a last minute cramming process. Try to have fun with this. No one need become a Sigmund Freud and intensely analyze every incident in daily life, but increased awareness of the usefulness of what you learn (and the assimilation and accommodation of that knowledge) will greatly increase its value to you.*
>
> *Grading will be on the basis of:*
>
> *25% Comprehensiveness (number of chapter topics covered in the collection)*
> *25% Volume, Variety & Credibility of Sources*
> *25% Pertinence to Topics*
> *25% Notes Connecting Material to Topics*

Comments from students on the end-of-course evaluation indicate that for a good number of people the project is indeed accomplishing the goals I had set for it.

Student comments on doing the project include:

> *The Life Long Learner Compilation was fun to do. I find myself looking for psychology "stuff" in the media now. Made me think about everyday events as I listened and looked for things to go in the folder.*
>
> *Fun, entertaining and insightful. It's amazing how much class learning you see in just reading a magazine.*
>
> *You're looking at everything through a whole different perspective.*
>
> *These helped me put real life with school life.*
>
> *I had my eyes and ears open for the past fifteen weeks. Keeping this file, to me, was fun and exciting. It's so built in me that I'm sure I'll continually be on the alert for significant info for a long time! I got real caught up in the search!*
>
> *I liked this part best. I found myself doing almost anything and somehow seeing or hearing something that I could say, "Hey, I know what that is!"*
>
> *The best I found was the article that described a possible link of amino acids to schizophrenia. It used the scientific method and I was able to apply it to learned materials.*

I enjoy hearing that a person intends to continue collecting evidence to enrich what he has learned; that he has during the course of the semester finely tuned his antennae to continuously monitor and pick up relevant information to expand his knowledge.

If you have an interest in trying a similar assignment in your course, first try the idea out informally yourself. Focus your awareness on detecting course-related information in the world outside our Technical College walls. Become aware of the times that you use the things you teach as you negotiate your days. Chances are you will be surprised at the number of times relevant topics are encountered. Trying it yourself will also make you aware of particular circumstances or publications which offer useful potential sources that students may also tap. If the search has been productive for you, chances are it will also be of value to your students.

The Life Long Learner Collection is concrete proof that what is taught is relevant to life. As one student put it, "This was like putting your ***own*** psychology book together-to show how ***you*** related to the topics." It doesn't get more relevant than that! ▼

THE TALKING COMPOSITION

Bill Warnken

All writers know that writing is both humbling and rewarding -often at the same time. In fact, it may never be more rewarding than when it is humbling us, teaching us lessons both to reinvest in the writing process and to take beyond the keyboard - lessons of faith, hope, failure, perseverance, insight, and triumph. But, it is how we go beyond the humbling of the blank page or the syntactically remote sentence, indeed are energized by them to reach a kernel of truth, that provides our challenge and defines us as writers. And those of us who teach writing, especially to students who are new to it or in whom writing has been dormant, in addition to facing our own daily challenges as writers must assume those of our writing students. Inexperienced and often intimidated by the writing process, beginning writers frequently offer a two-part disclaimer: "I can't write . . . and even if I could, I have nothing important or interesting to write about." We must penetrate this first line of defense if we expect to guide our students to a comfort zone, a way station on the road to the rewards of writing.

The second part of the disclaimer often proves easier to conquer than the first. To start, a simple but direct response - somewhat dictatorial but well-intentioned - is indicated: "Whether you've been on the planet eighty years or eighteen years, you **do** have interesting things to write about. And we are all beginning writers, re-creating ourselves every time we write." This response is complemented by a series of readings, whose authors have taken seemingly common experiences and invested them with meaning, looking closely at them over time to discover what Eugene O'Neill called the "behind life." Among suggested readings are Loren Eiseley's "The Brown Wasps," E.B. White's "Once More to the Lake," and Joan Didion's "On Going Home." These writers all amend the axiom of the classicist Matthew Arnold that "great writing comes from subjects that matter, that matter to the writer, that lead him to define his universe, his place in it, and his emotions." The point conveyed to the students is that if Eiseley's string of images from wasps nests to a tree planted in his youth, White's lake that spans generations, and Didion's old cemetery replete with family history serve as objective correlatives, then so too can the experiences to which students impart meaning. I find it particularly instructive to introduce essays from my former students here, essays that extrapolate meaning from a barn sale, a baseball catch with Dad, the strip mining of a cherished hunting spot, and a reluctant pilgrimage to an old school. These readings will begin to provide a comfort level and create an atmosphere for writing.

The fear of writing implicit in "I can't write" at first appears harder to dispel. However, there is a simple response that will liberate the student and initiate a long process that will eventually impart confidence and identity to the writer. The response is "OK, then let's talk." Just that simply, the "talking composition" is born.

To set the tone for the term, the talking composition must be the first writing unit at the beginning of the semester. And, since personal experience is a staple of conversation, a personal narration provides the logical starting point for the talking composition. Ground rules are user friendly and flexible. Students are asked to think about significant personal experiences, focus on one of them, and search for a controlling image or series of images in that experience that not only have an objective presence in the story line but also carry thematic implications. If possible at this early stage, which is really the "think-write" portion of the pre-write, the writer is coaxed to step away from the personal experience and make a value judgment regarding it. With a touch of reverse psychology, the instructor enjoins students from writing for the first few classes. They are to think about their topics and enjoy the readings. Once story line is clear, the writer begins to form a mental picture of the essay -how it will open, its body, and its conclusion. Classroom assessment of the readings will help students sense the magnificent variety available to them in forging these elements of the whole.

The "think-write" is neither bound by time nor space. Encourage students to take it on the jog, into the shower, to the table . . . anywhere, or simply settle it into an easy chair or under a soothing comforter. The blend of thinking and sensory stimuli is welcomed. The "think-write" will survive both work and play and become a constant companion: In fact, once sighted, the vision of the essay bombards the thinker, who assumes a posture somewhere between a passive receptor and the midwife who delivers the composition that will suddenly seem to have pre-existed in a platonic way. Fear is giving way to excitement and an eagerness to share the vision.

This period of incubation lasts a few days and is capped by an informal, non-threatening "talk" to the class, which is more a talk "with" the class. The writer discusses the burgeoning narrative, articulating its story line and then advancing to optional guidelines previously supplied by the instructor:

— project possible introductions and conclusions
— order the body in terms of placement of episodes, priorities, etc.

— "dry run" possible digressions to assess their usefulness.
— speculate about the controlling image that will serve as an objective and thematic focal point, a vehicle to elevate plot to meaning.
— test the viability of dialog.

The speaker/writer may employ note cards for direction and some reassurance. By now, several will have "cheated" and begun some writing in response to the compelling nature of thinking as pre-writing, their recent reluctance transformed into excitement. However, we are **not** reading text here; rather we are merging content and process in a verbal pre-write. The talk is not time bound but generally ranges from five to eight minutes. The beauty of the talking composition is that classmates, sharing the same range of emotions in their own "think-writes," will invariably be attentive and anxious to assist the speaker with whom they are "there at the creation" in a very real way and will offer not only support but insight. Audience response, then, really begins with the speaker's first word as each listener visualizes and personalizes the emerging text. Free to comment during the talk, listeners help shape the text for the speaker by seeking clarifications that may alleviate gaps that would otherwise have appeared in the written text. The audience also takes notes to facilitate the dialog when the speaker concludes. The role-reversal implicit in the instructor as note taker is not lost on the students.

The talking composition yields multiple benefits to writer and audience:

— The informal atmosphere fostered releases inhibitions and encourages a very natural discussion of writing, setting a tone for a semester's awareness of writing as process. Those who write about writing may well be envious, especially if they feel constrained to be on their best behavior as writers when writing about their craft. The "talking composition" writers need not be self-consciously above the fray, nor should they be intimidated by it. They are encouraged to let the warts show - good advice to all students of writing.

— The writer will discover what he really wants to write about and he will do this very naturally - through his own voice and the voices of the class, with all the implications of voice in writing applying. The audience will make sure the writer pushes the boundaries. So, if the real nugget in the portrait of grandfather is grandmother, the group will suggest that she be recast in the lead. Perhaps both will withdraw to the wings while an unexpected guest, who appeared late in the talking composition, will steal center stage. And yet in this, as in all particulars of the advice and consent, the writer remains the high court. The talking composition inheres this flexibility.

— The writer/audience dialog offers strategical tips: should the piece be chronological, use flashbacks (from a midpoint or an endpoint), or open with dialogue, definition, or any of the myriad possibilities for introduction? what details and episodes should be highlighted in the body? how can the writer gain sufficient detachment to evaluate the experience, offer an explicit or implicit philosophical statement or value judgment regarding it, and yet conclude concisely and with impact? what transitional elements work, which ones need fortifying/ is there a clear controlling image or a series of images, perhaps a central analogy to build on? although somewhat rare, has a spoken phrase or line been so appropriate, so memorable, that it demands to be reproduced verbatim in the draft? and, although not essential, has a working title emerged?

What is now developing is a verbal pre-draft, a "talk-write," the combined effort of writer and audience, beginning the process of distilling the many versions of the paper into a finished product, as yet drafts and revisions away. The writer now has the benefit of the imaginative powers of the entire class, for, in essence each student and the instructor will have created a personal version and vision of the speaker/writer's essay. Ideally, each listener is now as proud of his classmates' work as he is of his own. That is, each student values equally the roles of advisor, editor, and writer.

In addition to the satisfaction of helping classmates, audience members are often rewarded with a by-product of the talking composition. Frequently the speaker's presentation will prompt a recollection in the listener, one that may enhance a topic already considered or even suggest a completely new one. Thus, both speaker and audience are pushing the limits of their creativity by being open to suggestion, exploration, even change of direction. Ideas will be exchanged about topic, theme, focus, and tone. Indeed, tone may well be determined by the nuances of the speaker's delivery. Audience can certainly advise here.

There may be only one impediment to interaction between speaker and audience, and that is in the realm of emotion. While it is wonderful to be moved by each others' experiences, a loss of composure by the speaker is awkward for the audience, who need the emotions of the recounted experience placed in a broader context, viewed over time. The speaker is unfair to the listeners if he expects them to attain his emotional level of involvement in the experience. The irony is that if a speaker is overwhelmed emotionally by his own topic, rather than involving us more intimately in the process and structure of his essay, he achieves quite the opposite effect - he distances us. Furthermore, the writer will not be able to gain the necessary detachment to present his material to us coherently on the page. In short, the speaker/writer must assess his ability to deal with a given topic -perhaps allowing it to age before attempting to speak/write.

Once the dialog is completed, the speaker - who has been taking notes on audience input - begins to write in earnest, creating a first draft within a few days, capitalizing on the vitality of the classroom discussion. In effect, the writer has eased his way into what at first was a cold pond, acclimating himself, stroking comfortably, immersed in the creative element. Buoyed by the community of writers, he is no longer intimidated by the blank page because it never really existed. Words were there from the instant the speaker thought about the topic. Thus, early on, the writing process, a thinking process at its core, has been demythologized. There will certainly be hard work ahead, but the writer does not confront it alone. He has the support of classmates, who now have vested interests in each others' work and who will help chisel a final product from this conception. The community of writers is now striving to master the art of communication, in the form of writing. Individuals are not in competition but in concert, encouraging each other, staying positive, and infusing experience with meaning.

There is, of course, an element of the Edenic in all of this. Class size and the need to cover several rhetorical modes in a semester are realities confronting the instructor. Since the first round of talking compositions demands an inordinate time commitment, it is suggested that subsequent units implement the talking composition principles within small groups. Familiarity with the process will enhance the workshop atmosphere as the instructor floats among groups, freely enlisting the entire class's opinion on a given line or rough spot in a talk/essay and sharing the many discoveries along the way.

Perhaps the most intriguing development in the talking composition exercise is the awareness of writing as process. Collectively, the class changes from adjective to imperative the word "free" in "free writing" as each speaker liberates the writer trapped within. The very act of writing about writing, which should be an integral part of any writing class, will spawn lively, sincere prose as concentric circles ripple from moments of insight about process as well as product, reach shore, and are impelled back to the creative core, revitalizing it. The synthesis of writer, observer, and analyst produces precise, often profound, thought, which transcends borders and is frequently propelled by sharp analogies, the writer's acts of love for the language. In fact, classes on the analogy complement the talking composition quite well.

As all districts report in at the completion of the unit, results are obvious. Exit polls declare the whole class a winner. For those students who initially felt that the problem with writing is that words get in the way, several "writing" texts have been furnished: think-writing, talk-writing, listen-writing, prewriting, drafting, revising, and final drafting. Words, thus hewn, no longer get in the way, but show the way and become the way - the way to discovery. They help us break down our individual realities to their components, rearrange them, and rebuild them on the page. What we ultimately keep is important, but no more than what we eliminate - for our roads not taken instruct. As writers, we must have our own town dump, where discards tell us something about ourselves as writers. For even these discards play a pivotal role - they make space for our text as though we have thinned a garden.

Our community of writers is now so pre-occupied with writing - thinking about text and process often and intensely - that the text and process become parts of the individual writer and of the group. A bond is formed through a strong commitment to writing as a special, sacrosanct process. There is an integrity here which inspires students and teachers alike to share a new intensity, a healthy anxiety about their writing, which together they have taken to a new level simply by talking.

As a class, we are now ready to affirm that we do have something to say, that we can write, and that we are humbled by the task and vulnerable to certain risks, but that we are constantly rewarded by it. And at all stages of the process, we are talking, conquering doubt - not alone, but with our combined resources. And, simply, but most significantly, the talking composition has instilled the irrepressible urge to talk about composition. ▼

STUDENTS AS ASSESSORS

Nancy Marashio

> "Part of the secret of continuing development is the discovery . . . that expectations can be changed . . ."
> — Mary Catherine Bateson

> *"Revision, as many times as it takes, until we say "It's good," is a learning experience that all writers face."*
> — Bruce Maville

Why should faculty be the only designers of standards for student writing? When faculty are the sole source of standards, students misconceive writing assessment as merely the meeting of expectations set by others. In order to become strong writers, students need the opportunity to form and articulate their own understandings, to reflect, to talk with others, and to revise. If writing abilities are to grow, standards need to continue to expand - as students improve - beyond previous limits. Most of all, if writing is to improve, students need to **want** to meet evolving standards set for their writing.

Near the end of Spring semester Chris Maccioli articulated the following awareness of the phases of standards he saw students accepting:

> *We all set high standards for ourselves - and when we look back to evaluate how well we performed to these standards, the standards we had previously set seem to have, somehow, metamorphosed into a magnitude of higher standards with many substandards, like a sapling branching - budding - reaching for more light to grow . . .*

Such student acceptance of change as intriguing rather than as threat was one of the unforeseen results of my writing students at NHTC Claremont constructing their own evolving standards for assessment.

From the beginning students need to know that their special knowledge is essential to construction of standards, for it is that knowledge that frees them to find, to share, and to respond to THEIR strengths. Expecting teacher as judge, they smile when told that the original meaning of assessor is "judge's assistant." I like the word, though, for its emphasis on "one with special knowledge of the subject to be decided." Students write "special knowledge;" transforming that special knowledge into not only what student writers want to accomplish but also what teachers expect students to accomplish continues to be the tricky part.

Entering students come with a fascinating mix of no confidence and the assumption that they should be able to write everything, perfectly, at first attempt. Therefore, when first asked for their one initial standard for their writing, many actually write the word *"everything."* Pleased to continue to be asked to write standards from what they value, students struggle to select important aspects, struggle to word them so others see what they mean. Students discover that they have the same difficulties writing standards that they have writing anything else; their focus is on seeing what they are doing as writers.

After first attempts, students begin to balk. They value the uniqueness in each paper, like all of us who see differences more readily than we see likenesses. As they see each writer progressing differently, they fear that uniform standards will interfere with, rather than support, writing progress. They feel standards will force them to write **less** than they mean to convey.

Two opportunities for student learning result. First, students become aware of the conflict between what the self, the I, the writer values and what an "other" might suggest. Writing students learn to look at their own confidence level when asked how willing they are to examine responses from others. Secondly, students have to acknowledge that in fact there is not acceptance of but resistance to universal standards that would be applied to all papers. Interestingly I've seen that same resistance among faculty. System English faculty from our seven campuses, though in substantive agreement about standards for papers, agreed to support very different articulations of standards by the separate campuses rather than work toward one generic list. In a System Pedagogy workshop on assessment, faculty from different programs insisted that each needs different assessment designs and tools to measure what is being learned. Like faculty, students have to be converted to belief in agreement about standards.

Their resistance, though, helps them see and then stand for what they value. And what they value first is freedom to find what is important to **them**. Encouraged to voice what matters most, each student produces a list of standards for what s/he is attempting.

Denise plans to

* *expand*
* *express ideas*
* *focus*
* *make reader understand*

Susan says she will

- *sit down and write*
- *write what comes into my head*
- *get what comes into my head down on paper*
- *go back to paper - rearrange*
- *write a piece that is logically and interestingly arranged*

Justin expects to

- *clarify*
- *make meaning come across*
- *make writing ideas come across*
- *come across in a clear way*

Tina is going to

- *do a paper on identified topic*
- *silence inner critic*
- *ignore inner critic*
- *periodically sit down and let writing flow*
- *concentrate on ignoring critic*
- *write down thoughts when listening to inner critic*

And Barrett expects to be able to

- *concentrate on what I have learned*
- *help confidence*
- *feel more accomplished through extra effort*
- *not be so hard on myself or my writing*
- *write to ability*
- *move to next plateau*
- *write step by step, in process*

Wording and sequence of these lists is as they come from the students - reflecting both their thought processes and how stating one standard leads them to expect another. All these responses for assessing **one** assignment would, in their view, be fair expectations for them as students relatively new to college writing.

For them such impossible standards seem reasonable. They had been expected to be "perfect" in the past and see no reason to question such expectations; they question only their lack in achieving. I question what magic they expect would move them through so many and such different steps. How would they reach their final stated goal (*"make reader understand,"* *"write a piece that's logically and interestingly arranged,"* *"come across in a clear way,"* *"write down thoughts when listening to inner critic,"* and *"write step by step, in process"*) by following the standards they have listed?

These drafts of student standards for writing help us all acknowledge that what students expect to achieve might not be immediately achievable. These lists convince students that writing helps them at least clarify what is in their minds and convinces me that we need to focus more on what is possible for them to achieve. What the lists also help us realize is how the student view of process and product mixes together writer/writing process/writing product.

Asked to try to more concretely see what their papers attempt and to give responders the tools to assess the attempts, students begin to accept the truth that standards do not mean papers become generic. Clearer articulation of what is being attempted could lead to writer insights and writing revisions that are true to the writer's intention and to better writing at the same time.

We change tactics. Working from one set of revised papers, we try to draw from the papers the standards that make these papers effective. Talking about the strengths in each paper, students agree that what makes them strong includes:

* *use different examples that relate to the whole idea*
* *give enough about one before going on to another*
* *keep reader listening for clues*
* *make reader visualize what writer is saying*
* *choose words to bring together ideas*
* *detail vividly*
* *show respect for what is described*
* *sound complete*
* *complicate things effectively*
* *drive to conclusion*

These student standards focus more on the writing product and its impact. Students, however, judge them somewhat superficial. They also agree that the standards might not produce the same scores from different readers; they are beginning to see the need for standards that are consistently measurable.

Our next try faces the need for two looks at papers. First we respond to help the writer feel supported in what sh/he is attempting. Only then do we try to connect each paper to standards that might help improve the paper. For this look our sequence is to write standards, write the paper, respond to the paper, revise the standards after responding to the paper, and only then to revise the paper to meet the revised standards.

Robert writes the standard "*write a story that my reader/listener will feel what I'm writing* and revises to "*write a story that is consistently funny and has the reader laugh in the right places.*"

Tina introduces a paper as focusing on "*taking the long term relationship with my dog*" but through discussion restates its focus first as "*show how much I care*" and finally as "*responsibility of love.*" Her intention moves from a fairly simple overview over time to a more complex view of sustaining bonds, seeing the young in the old, and remembrance of the dog as family. Her assessment changes from a negative "*trying not to run on*" in the overview draft to a positive "*be proud of the writer I'm becoming.*"

Robert and Tina write revisions of papers, standards, and assessments as an integral part of their work on drafting and revision. In this sequence they hone their thinking and look more toward the measurable. Robert narrows focus to humor in the writing; Tina wants to measure the writer even more than the writing.

Again we try to return focus directly to the writing, revising to reflect only that focus. Again we are not totally successful. Jamie's "*accurately picture a peaceful place*" becomes "*express harmony of feelings and surroundings.*" Sharon's "*show search for familiarity, where I was comfortable*" becomes "*use teapot to set up hope for recapturing happiness then fulfilling the hope through rediscovering other items.*" Student writers continued to mingle the writing with their intentions for the writing, even when untangling the two is the sole articulated purpose of our work. Frankly, though I find that frustrating, I also am relieved to better understand why what we ask as teachers is often so difficult for learners. I am learning along with my students as we struggle with their assessing input.

Even what I had assumed was the simple expectation of having students write standards clearly includes more complex results than I had anticipated. Originally my simple expectation was to encourage students to buy in to what makes writing effective. The most complex unexpected result is that the high but oversimplified expectations of day one are actually becoming fulfilled, while retaining their complexity, by the end of the semester.

But what bowls me over comes as I compare student writing of standards from day one and from the last day of class, writing students construct without the benefit of comparison. Students had known more than they or I had realized on that first day. Over and over I read day one seeds for last day flowering. Those who needed to free the writer on day one show specific moves toward that freedom. Those who needed to generate or draft or revise identify specific steps they have discovered to begin meeting those needs. And those who focused on what they had to say and the response that showed how they had been heard express their expanded insights into what harmonizes that interaction.

A SAMPLER

	In First Class	*By Final Class*
Jamie Lockwood	*- need a lot of help but am eager to learn*	*- have the courage to at least try and know it's all right to continue trying* *- find acceptance and appraisal* *- rediscover my passion for reading; reading has made trying to write easier* *- be pleased with a couple pieces and have other pieces to work on, giving me a goal for the future*
Jennifer Murgatroy	*- overcome my fears of writing* *- learn to write down what I am thinking in a way that others will understand what I am trying to get across*	*- feel more confident* *- learn to be myself when writing, that there are a lot of steps in the writing process . . . in growing as a writer . . .* *- know when my writing is good and admit it; even know when my writing is not so good and change it to make it better* *- know that I will continue to learn and improve* *- set standards for myself but standards that are reasonable and not too high*

	In First Class	*By Final Class*
Danielle Scribner	*- improve on getting started* *- expand*	*- think about what my topic will be on my way to work, on break, or when I'm cooking supper* *- spend more time giving myself quiet time to concentrate on my writing*
Barrett Rasmussen	*- to improve all around; eventually ideas will prevail*	*- learn what I want to say* *- know what I'm going to say before I start nit-picking at the grammar and punctuation* *- see and hear other people's ideas and fall back on them to create my own subjects* *- show my hard effort by sharing* *- take a controlling idea and work with it*
Justin Eller	*- learn how to express myself on paper* *- say everything*	*- clear my own ideas up* *- cut out the muck and concentrate upon the real content* *- accomplish more insight* *- thoroughly enjoy criticism and praise alike*
Sharon Gierko	*- give people a new way to look at things through my writing*	*- pay closer attention to what I'm trying to say*

	In First Class	*By Final Class*
Paul Slade	- *write a paper without thinking for a couple of hours or where to begin* - *make it not only interesting to me but to other people*	- *unleash the power of my ideas* - *enliven a paper*
Scott Giossi	- *become the best writer I can be* - *have others be captured by my writing*	- *not worry so much about what the critics have to say about my writing* - *share a lot more of my work with others* - *capture that magic that authors . . . possess*
Chris Maccioli	- *write a bunch of thoughts and feelings down and then try to organize and understand them*	- *organize my thoughts* - *layer, draw in, let the reader see my vision*
Sue Greenwood	- *be able to relay your thoughts and ideas in a complete and understood fashion*	- *become more comfortable with the thought of being a "writer"* - *become more confident about my ability to write* - *believe in myself and therefore in my writing*

What I have distilled from urging students to write standards as ***they*** see them is a clearer view of what ***they*** value in the writer/writing process/writing product/response mix. Uncertainty and ambiguity are part of the work of writing, and assessment standards written by students evolve as uncertainly and ambiguously as the writing and the writers do. But evolve they do!

The results of this work intrigue me more than satisfy. I better understand why portfolio pieces chosen by students as their best work often are not what I see as their best; why changing standards throughout the semester (instead of setting final standards at the beginning) matches the changing learning of students; how encouraging students to write the standards keeps them at the center of the learning; and why student confidence has risen (realistically), standards have lowered (from impossible to possible), and skills and abilities have improved (which is, after all, the underlying purpose of assessment).

Students develop the confidence to reject the impossible, write standards to identify the possible, and strengthen abilities to learn more. Writing expectations are changed. Students become willing to continue to reach for more.

Near the end of Spring semester Susan Greenwood articulated awareness of the syntheses she now expects and experiences through writing; a selection follows:

> *. . .I am afraid to expose my creation to the light of day; if I like it, I am afraid you won't, and I will be hurt . . . .*
>
> *A friend of mine recently gave me a small rock. It is called a sun rock by the Indians in Arizona. My friend told me the Indians believe that if you keep it with you, hold it next to your body, or rub it, that it will drive the darkness out of your heart and let the sun shine in. It must work, for when I hold that rock I think of the concern my friend has for my happiness, and I smile. It is the thought that has touched my heart and made me smile.*
>
> *That is the kind of writer I want to be. I want to touch your heart. I want you to hear my voice, to feel my pain, to see through my eyes. I want to let my words be the rock that sparks an emotion. While you are reading what I have written, I want you to hear what I am saying.*
>
> *So, what kind of picture have my words created? . . . A middle-aged lady sitting at a bench in a factory looking at circuit boards through a magnifying light and frantically jotting down gems of wisdom. My employer may possess the greater portion of my time, but my writing possesses a portion of my heart.*

Susan reveals her view of progress by synthesizing writer/writing process/writing product/response.

Executive Director of the National Council of Teachers of English, Miles Myers, evaluates progress this way: "I do not accept the requirement that you have to have 100 percent agreement in order to represent a sense of what is good performance. It is useful to have a dialogue any time you are ranking complex issues."

Our dialogue will continue. As more students at NHTC Claremont become assessors, we will untangle more evidence to see both what is improving and what needs to be improved. What is most exciting and frustrating at the same time is that the next class will reveal a new slant, will instigate other unrealized insights, and will motivate new standards for different achievements - next steps along our unending path of learning. ▼

REFERENCES

Conference on College Composition and Communication. **Writing Assessment: A Position Statement (Draft)**. Urbana, Illinois: National Council of Teachers of English, 1995.

Myers, Miles. "Teleconference Reaches Thousands With Standards Information." **The Council Chronicle 4**, (April 1995):3.

For their insights I am grateful to:
Denise Alvarado, Susan Blackwood, Justin Eller,
Sharon Gierko, Robert Giguire, Scott Giossi,
Susan Greenwood, Diana Lee, Jamie Lockwood,
Christopher Maccioli, Jennifer Murgatroy,
Barrett Rasmussen, Danielle Scribner, Paul Slade,
Tina Stearns, and all of my students who keep me
aware of what matters most in teaching and learning.

BECOMING TEACHERS AND LEARNERS:

The Evolution of a Survey Course

Keith W. Bird

The offering of broad survey courses such as "Western Civilization" provides unique challenges and opportunities in undergraduate education and in particular two year colleges. Such courses are regarded as "service courses," which all students have to complete in order to fulfill general education requirements, preferably as soon as possible in order to concentrate on courses in their chosen major. Many faculty in my field prefer to teach history majors in more specific upper-level courses. For me, the opportunity to reach a wide variety of students—most of whom have no interest in history—is a personal challenge. At the same time, I often argue that, ideally, a "Western Civilization" course should be a capstone course for either seniors or graduate students who would have had both the breadth and depth of historical knowledge to synthesize and apply interdisciplinary methodology.

When I first developed my "Western Civilization" course in 1971, it became apparent that my lecture format needed to be supplemented with multimedia (a modest University research grant funded the acquisition of slides and tapes which demonstrated the art, architecture, cultural and social and political trends in Western Civilization). The fact that the majority of my classes were in the evening (the University of Bridgeport operated on a "one-college" concept—day and evening on one schedule) meant that all but a few students were "non-traditional" students and more "active learners" than the undergraduates I taught as a teaching assistant at Duke. By 1989, "Western Civilization" became "The Making of the Modern World," covering the period from the 16th century to the present.

Three other courses I developed concurrently in the early 1970's also affected my teaching methods. The first, an honors seminar on "Futurism," explored technology forecasting and the growing interest in Futurism (inspired, in part, by Alvin Toffler's ***Future Shock***). This course led to discussions with several commercial forecasting companies and visionaries such as Buckminster Fuller which contributed to the development of a matrix identifying key areas in which change has occurred, occurs and will occur. Although hundreds of specific categories were reviewed as part of futures modeling exercises, the following categories (which I also refer to as historical factors) proved to be most useful for instructional purposes in demonstrating the relationships between past, present and future:

1. social
2. political
3. economic
4. technology
5. intellectual cultural
6. military
7. religion
8. the "X-factor" (to allow for negative and positive unforseen elements such as climate, geography, plagues, earthquakes, etc.)

Using these categories, students are asked to evaluate sources such as textbooks, novels, films, and documents, to identify where and how they exist, and to analyze how they interrelate with one another to cause change. For example, what was the impact of the invention of the stirrup (technology factor) on warfare and the defeat of the Moors in 732 on the course of Western Europe or how has the computer changed the way we live and work? In addition to specific student writing exercises, on-going student evaluations and formal end-of-the semester evaluations are monitored to provide feedback as to the effectiveness of the use of these factors.

The other two courses impacting on the evolution of this course were interdisciplinary courses co-taught with faculty from the journalism and cinema departments respectively: "History and the Newsreel" and "History and Cinema". These courses reinforced the effectiveness of utilizing visual documents both as historical sources and as teaching tools.

By 1991, I characterized the course as lecture based with a multi-media component (slides, music and films). In the summer of 1994, I was invited to offer the course at the NH Technical College in Claremont. The opportunity came with a challenge by my colleagues—and myself—to practice the new teaching techniques and tools that the Pedagogy Committee and a number of faculty had been exploring and to actively engage in "classroom research". I was initially reluctant to "let go" of my major use of the lecture as a primary source of "content." This goes back to my experiences in the mid-1970's, when I worked on a Federal grant project which required all courses to be competency based. I found myself expressing concerns on how to develop competencies in my history courses since I believed that something "mystical" (and therefore unquantifiable) occurs when I stand at the front of the class to deliver knowledge.

In lieu of any formal lecturing during the first two weeks, I attempted to use journals (for both myself and the students). Through questions and discussion, I sought to engage the students in their own learning. My journal entries for the first several weeks revealed my initial fears over whether I was "giving" the students enough information, and then I experienced a profound sense of freedom when I realized that students were learning and helping each other and *me* in expanding upon the textbook and class discussions. Through the development of mini-lectures or "case studies", I found a method whereby students could focus on a particular problem or issue and then through group discussions challenge me to go beyond the scope of my previous lecture format. A second tool I used, with great success, and is now part of my course format is the use of the evening news. It provides stimulating additional content to be compared to developments in the past and to reinforce the usefulness of the eight categories to organize data. Student evaluations consistently cite the effectiveness of this tool in defining interrelationships between past and future. Stated one student:

"...I don't take the time to really think in-depth about what is being presented to us by the media. Now I can look at the stories being presented and be more questioning and critical. Also with the background supplied, the present world events make more sense. I learn quickly by visual images so the news was a good media for historical connection".

Although I had always assigned writing exercises (essays) as the primary means of evaluating student performance and progress, I also designed another assessment instrument to evaluate students' ability to demonstrate not only what they have learned but how they can continue to learn using the tools acquired through the course. As a result of efforts to understand how to integrate national standards into curriculum, I obtained a copy of the framework for U.S. History developed for the National Assessment of Educational Progress (NAEP) at grades 4, 8, and 12. The NAEP U.S. History frameworks are not to be confused with the much debated (and maligned) United States History Standards project drafted under the leadership of the National Center for History in the Schools at the University of California at Los Angeles. The "Seven Assumptions about History" - xfrom which the NAEP U.S. History framework was derived – actually articulated closely to my course objectives and the "tools" I had already developed. The "Seven Assumptions" are as follows:

1. Historical study should connect people and events across time and include all kinds of human thought and activity: political, social, cultural, economic, technological, philosophical, and religious.

2. The study of history must analyze change and continuity over time, explore the range of choices that have been available to people, and examine the possibility that historical outcomes could have been different depending upon the options selected.
3. Historical study should include famous people and ordinary individuals as well as events on a grand scale and in everyday life to illuminate the range and depth of the human experience as well as differing perspectives.
4. History should include the analytical study of political ideals, show how and why core civic ideas have been forces for change, and recognize movements like the Age of Democratic Revolutions.
5. History has a spatial dimension, and, therefore, the main ideas of geography such as the locations of places and relationships within places should be included as important parts of the study of history.
6. Historical events should be linked across time and space through enduring themes that establish context for the people,ideas,movements, issues, and sources to be addressed in each historical period.
7. Studying history should develop historical reasoning skills, including the ability to think and judge evidence responsibly,independently, imaginatively, and critically; the power to comprehend multiple causation; and the capacity to formulate and defend generalizations about the past.

For students who have been taught history as a collection of "facts", often unconnected from each other, and from one's present and future reality, my approach had always been to focus on the forces for change or continuity in history and the need for organization, analysis and interpretation. With the overwhelming amount of information bombarding us daily and the competition for "relevancy," it is not surprising that most students approach a broad survey course such as "The Making of the Modern World" with a limited historical perspective. By modifying the "Seven Assumptions" for "Western Civilization", I sought to create an assessment tool which could not only assist in the evaluation of student learning, but could also improve the course through the student's analysis of their ability to learn as measured against the "Assumptions". Through their self-evaluation of the "Assumptions", the students also provide a more thorough evaluation of my effectiveness as a teacher and learner than I have found from traditional student evaluations. Under each of the seven assumptions listed above, students are asked to discuss three questions:

a. To what extent did this course accomplish this?
b. What would you add/revise/omit to better accomplish this for this course and your understanding of history?
c. What tools, techniques would you use to accomplish "b"?

The results of this "classroom research" project after several classes appear promising in several areas. First, students are confirmed in their ability to know what and how to learn and secondly, student evaluations of the course vis a vis the "Assumptions" demonstrate areas of strength and areas requiring improvement regarding the various methodologies and activities. In direct reference to Assumption No. 2, for example, one student wrote, " I recognize in most historical events there usually [are] more than one choice that will direct events. If asked, I could analyze what the outcome might have been with different choices." As a direct result of these evaluations, I am researching ways to integrate geography more fully into the curriculum and exploring new assessment methods such as journal/portfolio activities for students and me to measure progress.

Among the broader lessons learned from my teaching experiences beginning with my "rebirth" as a "teacher and learner" at NHTC-Claremont are the following:

1) support from enthusiastic colleagues who provide encouragement, share experiences and resources is essential. The wealth of resources of our faculty to be shared among our institutions is truly impressive.
2) "classroom research" needs to be actively promoted and supported as a significant staff development.
3) the focus on teaching more as science than art (from alchemist to scientist) has greatly enriched me as an academic administrator, scholar, teacher and especially as a ***learner***.

The words of Chaucer "and gladly wolde he [she] lerne and gladly teche" have never had more meaning for me as an individual and as a professional. I have discovered the empowerment that results from the fact that all of us in the educational process—no matter what position or duties we hold in supporting the academic mission—whether students, faculty and staff, must be both teachers and learners. ▼

AUTHORS

Keith Bird, NHTC-Claremeont/Nashua, 542-7744, 882-6923
Nancy Blair, NHTC-Claremont, 542-7744
Sandra Cole, NHTC-Claremont, 542-7744
Lorraine Cosseboom (student), NHTC-Claremont
Doyle Davis, NHTC-Berlin, 752-1113
R. Allan Dermott, NHTC-Manchester, 668-6706
Barbara Dimmick, NHTC-Claremont, 542-7744
Gerry Doane, NHTC-Claremont, 542-7744
Francesca Fay, NHTC-Laconia, 542-3207
Norma Forbrich, NHTC-Claremont, 542-7744
Donna Gagne, NHTC-Berlin, 752-1113
Andrea Gordon, NHTC-Claremont, 542-7744
Thomas Gorka, NHTC-Claremont, 542-7744
Maureen Houghton, NHTC-Laconia, 524-3207
Terrie Judge, NHTC-Berlin, 752-1113
Diane Lindquist (student), NHTC-Claremont
William McIntyre, NHTC-Nashua, 882-6923
Nancy Marashio, NHTC-Claremont, 542-7744
Paul Marashio, NHTC-Claremont, 542-7744 (603)
Bruce Maville (student), NHTC-Claremont
Diane Ellis Miles, NHTC-Laconia, 524-3207
Dave Miller, NHTI-Concord, 225-1800
Jane Whittington Picard, NHTC-Claremont, 542-7744
Regina Raymond, NHTC-Claremont, 542-7744
Walter Ryan, NHTC-Claremont, 542-7744
Denise S. St. Cyr, NHTC-Manchester, 668-6706
Neal Steiger, NHTC-Laconia, 524-3207
Bill Warnken, NHTC-Claremont, 542-7744
William Wheeler, NHTC-Laconia, 524-3207